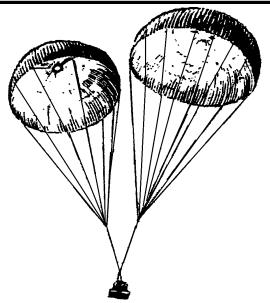


TRIANNUAL

AIRDROP REVIEW AND

MALFUNCTION/SAFETY ANALYSIS



PREPARED BY
THE US ARMY QUARTERMASTER SCHOOL
FORT LEE, VIRGINIA 23801-1502

AIRBORNE CREED

I am an Airborne trooper! A paratrooper!

I jump by parachute from any plane in flight. I volunteered to do it, knowing well the hazards of my choice.

I serve in a mighty Airborne Force—famed for deeds in war—renowned for readiness in peace. It is my pledge to uphold its honor and prestige in all I am—in all I do.

I am an elite trooper—a sky trooper—a shock trooper—a spearhead trooper. I blaze the way to far-flung goals—behind, before, above the foe's front line.

I know that I may have to fight without support for days on end. Therefore, I keep mind and body always fit to do my part in any airborne task. I am self-reliant and unafraid. I shoot true, and march fast and far. I fight hard and excel in every art and artifice of war.

I never fail a fellow trooper. I cherish as a sacred trust the lives of men with whom I serve. Leaders have my fullest loyalty, and those I lead never find me lacking.

I have pride in the Airborne! I never let it down!

In peace, I do not shirk the dullest duty nor protest the toughest training. My weapons and equipment are always combat ready. I am neat of dress—military in courtesy—proper in conduct and behavior.

In battle, I fear no foe's ability, nor underestimate his prowess, power and guile. I fight him with all my might and skill—ever alert to evade capture or escape a trap. I never surrender, though I be the last.

My goal in peace or war is to succeed in any mission of the day—or die, if needs be, in the try.

I belong to a proud and glorious team—the Airborne, the Army, my Country. I am its chosen pride to fight where others may not go—to serve them well until the final victory.

I am a trooper of the sky! I am my Nation's best!
In peace and war I never fail. Anywhere, anytime, in anything—
I am AIRBORNE!

IN THIS ISSUE

VOLUME III - 1997

Preface	ii
Change of Address	ii
Reports and Analyses	iii
Cargo Malfunction Reports and Analyses	1
Personnel Malfunction Reports and Analyses	47
Summary of Supply and Equipment Drops	74
Summary of Personnel Parachute Jumps	74
Summary of Personnel Parachute Malfunctions	75
Injuries Occurring on Parachute Operations as Reported on DA Form 285	75
Aircraft Malfunctions	76
Hot Poop	77

PREFACE

The airdrop review and malfunction/safety analysis is published by the US Army Quartermaster School in hopes that by "passing the word" the malfunction rate within the Armed Forces may be minimized. The review and analysis in this issue covers the period 1 September 1997 - 31 December 1997.

POC AND MAILING ADDRESS

The POC for Airdrop Malfunction Reports, Monthly Airdrop Summary Reports, and any other information concerning the Airdrop Review and Malfunction/Safety Analysis is Mr. Roger Hale. All correspondence for the above reports and analysis should be addressed to:

AERIAL DELIVERY AND FIELD SERVICES DEPARTMENT ATTN MR ROGER HALE USA QUARTERMASTER CENTER AND SCHOOL 1010 SHOP ROAD FORT LEE VA 23801-1502

CHANGE OF ADDRESS

To change your mailing address, please send the mailing label along with your new address to:

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REPORTS AND ANALYSES

The Malfunction Review Board met at Fort Lee, Virginia on 25 - 26 February 1998. A breakdown of the areas in which malfunctions occurred from 1 September through 31 December 1997 follows:

<u>CATEGORY</u>	QUANTITY
Containers/CRRC	14
Platforms	0
LVAD	8
Personnel	13

All DD Forms 1748-2 (Airdrop Malfunction Report (Personnel-Cargo)) are reviewed, and any identifying information is removed. Block 24 is annotated to include both Army and Air Force references if only one is given. No grammatical editing is done to the reports.

CARGO MALFUNCTION REPORTS AND ANALYSIS

										-	
1.	*** 	·	GE	NERAL							
1. UNIT BEING AIRLIFTED	2. DEF	PARTURE AI	RFIELD		3. D	ATE	4. TYPE C-	E ACFT -130		5. ACFT SER NO.	
6. OPERATION/EXERCISE			7. DZ AND I	OCATION			8. 0	DATE A	ND TIME		
9. ACFT ALTITUDE (Feet)	10. ACFT SPEED (Kn	ots) 1	1. DZ ELEVATI	ON (Feet)		12. SURF	ACE WINDS (Knot	s)	13. VISIB	ILITY (Feet/Miles)	
700 AGL	125 Knot	ts	15 Feet				10 Knots		U	Inlimited	
111.				CARGO							
23. TYPE LOAD AND WEIGHT	24. RIGGED IAW (TMITOINAV	AIR No.)	25.			AERIAL DELIVERY	Y SYSTE	STEM USED		
				DUAL	RAIL	X	CDS RELEASE GA	ATE	OTHER (Explain)	
	FM 10-5	SPEED (Knots) 11. DZ 5 Knots 11. DZ 6 Knots 11. DZ 6 I 10-500-3/ 0 13C7-1-11 DE PARACHUTE 128		NO. PLATE	ORMS		NO. CONTAINERS	5			
Containers							2				
26. TYPE PLATFORM/AIR- DROP CONTAINER	27. TYPE PARACH AND NUMBE		28. SIZE EXTI LEASE P	RACTION/RE- ARACHUTE			NGTH OF REEFIN	G	30. POSIT	TION OF LOAD IN RAFT	
									1	of 2	
CDS	(1) G-12	5 Knots 11. DZ ELE 5 Knots 1 5 Knots 1 6 GED IAW (TMITOINAVAIR No.) M 10-500-3/ D 13C7-1-11 PE PARACHUTE LEA	68-I	68-Inch Pilot			NA			S 630	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The malfunction occurred on a day training mission dropping a single stick of a two-bundle CDS rigged with a single guillotine knife. Both loads exited the aircraft as normal. Load one streamed in. It was evident that neither the 68-inch pilot or G-12E parachutes deployed. The load impacted the ground destroying the skidboard and training load.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Upon investigation, it was discovered that the bottom bag closing loop was mis-routed through the L-Bar connector. The 68-inch pilot parachute bag closing tie was correct and the pilot parachute was attached to the G-12E correctly. Due to the cotton bag closing loop being through the L-Bar connector, all the weight and stress was placed on the cotton loop instead of the closing tie which caused the malfunction. The cause of the malfunction was rigger error. The rigger did not follow the proper procedures as stated in TM 10-1670-281-23&P or FM 10-500-3.

CONTINUED ON NEXT PAGE

ANALYSIS: 1

WHAT WAS THE MALFUNCTION?

Parachute did not deploy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Parachute was not packed correctly. The bag closing tie was misrouted through the L-bar connector link.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper rigging procedures are followed.

1.		GE	NERAL			-			
1. UNIT BEING AIRLIFTED	2. DEPARTURE A	IRFIELD	1	3. DAT	•	4.	TYPE ACF	-	5. ACFT SER NO.
							C-13		
6. OPERATION/EXERCISE		7. DZ AND	LOCATION				8. DATE	AND TIME	
9. ACFT ALTITUDE (Feet)	10. ACFT SPEED (Knots)	11. DZ ELEVATI	ON (Feet)	12.	SURFACE W	INDS (Knots)		BILITY (Feet/Miles)
650 AGL	130	311		1	;	5		5	5 SM
			7					•	
III.			CARGO						
23. TYPE LOAD AND	24. RIGGED IAW (TMITOINA		I						
WEIGHT	, , , , , , , , , , , , , , , , , , , ,	,	25.		AERIA	L DEL	IVERY SYS	TEM USED	1
	FM 10-500-3/		DUAL R	RAIL	X cos	RELEAS	SE GATE	OTHER	(Explain)
CDS X 5	TO 13C7-1-11		NO. PLATFOR			ONTA		1	(======================================
4837	Chapter 9							1	
1037	Chapter					5		1	
26. TYPE PLATFORM/AIR- DROP CONTAINER	27. TYPE PARACHUTE AND NUMBER	28. SIZE EXT	RACTION/RE-		29. LENGTH	OF RE	EFING		ITION OF LOAD IN
DAG! CONTAINE!	7.11.0 11.0 11.0 11.0								
4 22	261111	l ,	T A	i	,			Ι,	70 617
A-22	26 HV	l N	ΙA			NA		1 1	FS 617
	UNCTION/FAILURE (le out was fully infl	_							
						_			
	CONT	INUED	ON NEX	XT l	PAGE				

ANALYSIS: 2

WHAT WAS THE MALFUNCTION?

Parachute failed to inflate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Air starvation.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

NA

1.		GI	ENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE	AIRFIELD	3.	DATE		4. TYPE ACFT C-130		
6. OPERATION/EXERCISE		7. DZ AND	LOCATION		8. DA	TE AND TIN	ME	
9. ACFT ALTITUDE (Feet)	10. ACFT SPEED (Knots)	11. DZ ELEVATI	ON (Feet)	12. SURF	ACE WINDS (Knots)	13. V	ISIBILITY (Feet/Miles)	
800	130	NA			2		Clear/7	
			7_					
101.			CARGO					
23. TYPE LOAD AND WEIGHT	24. RIGGED IAW (TM/TO/NA		25.		AERIAL DELIVERY	YSTEM US	ED	
			DUAL RA	ıL X	CDS RELEASE GAT	ОТН	ER (Explain)	
A-22 Container	FM 10-500-	3/	NO. PLATFORM	15	NO. CONTAINERS			
1850 Lbs	TO 13C7-1-	·11	N/A		1			
26. TYPE PLATFORM/AIR- DROP CONTAINER	27. TYPE PARACHUTE AND NUMBER		RACTION/RE- PARACHUTE		ENGTH OF REEFING INE		OSITION OF LOAD IN IRCRAFT	
A-22	G-12E	68-]	Inch Pilot		N/A		Center	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The CDS bundle exited the aircraft normally. During deployment, the suspension lines elongated but the canopy failed to inflate, causing total destruction of the sandbox-training load.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Inspection of the load and canopy on the ground revealed that the suspension lines were twisted from 5 feet above the connector links to the lower lateral band. All suspension lines and canopy ties were broken. After a full inspection at our shop, the following discrepancies were noted: Left Riser Group - Burns on all plys from edge to edge 3/4-inch in width. Lines 7, 8, 10, 14, 17, 18, 19, 20, 21, 24, 26, 27, 28, 30, 34, 37, 40, 45, 46, 51, 52, 54, 56, and 60 all have burns 25 and 30 feet below the lateral band. Line 23 is burned from connector link to lower lateral band. Line 3 was broken. The canopy had one hole, gore 7 section 5. The centering line was measured at 53 feet 8 inches. Date of manufacture on the canopy is Dec 69. The malfunction is believed to have been caused by a combination of line 3 having been routed around the risers, possibly during rigging/transportation, and the short centering line causing the apex to extend into the suspension lines.

CONTINUED ON NEXT PAGE

ANALYSIS: 3

WHAT WAS THE MALFUNCTION?

Parachute failed to inflate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. Centerline was only 53 feet 8 inches instead of 57 feet.
- 2. Parachute not properly laid out.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

- 1. Follow proper packing procedures according to TO
- 2. Find a method to properly measure centerline.

I. 1. UNIT BEING AIRLIFTED							
1. UNIT BEING AIRLIFTED		GI	ENERAL				
	2. DEPARTUR	RE AIRFIELD	3. [ATE	4. TYPE ACE C-13		5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND	LOCATION		8. DATE	AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots)	11. DZ ELEVATI		12. SURFACE WIN	os (Knots) alm		ILITY (Feeti M iles)
03071GE	130	1					DIVI
			<u> </u>				
III. 23. TYPE LOAD AND	24. RIGGED IAW (TMITO)		CARGO				
WEIGHT	24. RIGGED IAW (TMITO)	MAVAIR NO.)	25.	AERIAL	DELIVERY SYS	STEM USED	
	FM 10-50	00-3/	DUAL RAII	X CDS REI	EASE GATE	OTHER	Explain)
	TO 13C7		NO. PLATFORM		TAINERS	1	, ,
CDS/930	Chapter 9			1			
				1		22.226	
26. TYPE PLATFORM/AIR- DROP CONTAINER	27. TYPE PARACHUTE AND NUMBER	LEASE P	RACTION/RE- PARACHUTE	29. LENGTH O LINE	REEFING	30. POSI AIRC	TION OF LOAD IN RAFT
		,					
A-22	26 Foot HV	l _N	Α	N	Α	F	S 530
1 DESCRIPTION OF A	IALFUNCTION/FAILU	DE/DAMAGE	INCUIDDED (4		3 . 3 4	•	
on the knife. No	namage or injury.						
32. CAUSE OF MAL	FUNCTION/FAILURI	E (If more spa	ace is needed	continue on	reverse.)		
		_					
Maintenance insp to slip when a loa	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	ected the retrieve						_
Maintenance insp	pected the retrieve ad was applied. C	Clutch was	adjusted I <i>a</i>	AW TO 1C			_
Maintenance insp	pected the retrieve ad was applied. C		adjusted I <i>a</i>	AW TO 1C			_

ANALYSIS: 4

WHAT WAS THE MALFUNCTION?

Retriever did not break the safety tie on knife.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. Aircraft equipment failure.
- 2. Clutch out of adjustment (Western Gear).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

- 1. Clutch was adjusted.
- 2. Western gear is continuing problem.

I.	 		GE	NERAL								•	
1. UNIT BEING AIRLIFTED		2. DEPARTURE AII	RFIELD		3. DA	ΓE			TYPE ACF C-130		5. ACFT SER I	NO.	
6. OPERATION/EXERCISE			7. DZ AND	OCATION				L	8. DATE	AND TIME			
9. ACFT ALTITUDE (Feet)	10. ACFT SPE		1. DZ ELEVATIO		12	. SURF	ACE WIN		(nots)		BILITY (Feet/Mi	les)	
705 FT	130	Knots	304	Feet		Calm					Miles		
				-								==	
M.				CARGO									
23. TYPE LOAD AND WEIGHT	24. RIGGED) IAW (TM/TO/NAV	AIR No.)	25.			AERIAL	DELI	VERY SYS	TEM USED			
CDS Tng Load	FM	10-500-3/		DUAL		X	CDS REI			OTHER	(Explain)		
1340 LBS		13C7-1-11			JKMS		NO. CO	NIAI	NEKS	Non-	- '		
				N/A				1		Non-	Breakaway	/ S/L	
26. TYPE PLATFORM/AIR- DROP CONTAINER		ARACHUTE IUMBER	28. SIZE EXT LEASE P	RACTION/RE- ARACHUTE			ENGTH O	F RE	EFING		ITION OF LOAD) IN	
A-22	A-22 1-G12E DESCRIPTION OF MALFUNCTION/FAILURE/ DAI						N	/A		F	FS 617		
Static line retrieve were not cut. The the load or aircraft	load fail	ed to exit. I	Emergen	cy proc	edur	es w	ere in	niti	ated w		_		
Post mission insp static line retrieve The exact cause o	ection o	f the static li satisfactory	ine retrie , cutting	ver resu the 80 l	lted ' b saf	with ety	no di	isc	repand			ate.	
						_		_					
		CONTI	NUED	ON NE	хт	PA	GE						

ANALYSIS: 5

WHAT WAS THE MALFUNCTION?

- 1. Safety tie and release gate were not cut.
- 2. Load did not exit.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Aircraft equipment failure (winch).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Implement more stringent inspection procedures are followed (brake test).

l.		GI	NERAL			
1. UNIT BEING AIRLIFTED	2. DEPARTU	IRE AIRFIELD	3. 0	DATE	4. TYPE ACFT	
					C-130	
6. OPERATION/EXERCISE		7. DZ AND	LOCATION		8. DATE A	AND TIME
			,			
9. ACFT ALTITUDE (Feet)	10. ACFT SPEED (Knots)	11. DZ ELEVATI	ON (Feet)	12. SURFACE WIND	S (Knots)	13. VISIBILITY (Feet/Miles)
400 AGL	130	335	ASL	5 Knots		Clear
			7			
<u>m.</u>			CARGO			
23. TYPE LOAD AND	24. RIGGED IAW (TMITC	O/NAVAIR No.)	I			
WEIGHT	FM 10-500-	3/	25.	AERIAL DI	LIVERY SYST	EM USED
	TO 13C7-1-	·11	DUAL RAII	L X CDS RELE	ASE GATE	OTHER (Explain)
CDS	FM 10-529/		NO. PLATFORM	IS NO. CONT	AINERS	Non-CVR
1320 LBS	TO 13C7-10)-171		7		Single Stick
26. TYPE PLATFORM/AIR- DROP CONTAINER	27. TYPE PARACHUTE AND NUMBER		RACTION/RE- PARACHUTE	29. LENGTH OF LINE	REEFING	30. POSITION OF LOAD IN AIRCRAFT
		·				FSN 458
A-22	1 X G-12E	[68-]	Inch Pilot	N/A	A	3 of 7

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This load contained replicated TOW rounds. It was the fifth load to exit the aircraft. When load exited, the pilot parachute fluttered above the load and did not pull the G-12E off the load. The load was destroyed. The pilot parachute had one suspension line torn from the lower portion of the canopy. About 60 percent of the canopy was torn (almost shredded) and had several burn marks. No damage was found on any of the D-bags from that aircraft. The G-12 D-bag seams were ripped with canopy exposed and about 15 feet of suspension lines were pulled out. The G-12 separated from the load, probably on impact.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The cause was that the pilot parachute failed to inflate, therefore, the G-12E never came off the load. My conclusion is that the pilot parachute came in contact with another load (probably the one following it) which caused the damage to the pilot parachute and prevented it from inflating.

CONTINUED ON NEXT PAGE

ANALYSIS: 6

WHAT WAS THE MALFUNCTION?

- $1.\,68$ -inch pilot parachute was destroyed and could not deploy the G-12.
- 2. Block 31 says fifth load to exit.
- 3. Block 30 says position 3 of 7.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. Possible material failure (amount of use at JRTC).
- 2. Possible entanglement with the load.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper rigging procedures are followed.

1.			G	ENERAL					<u></u>	
1. UNIT BEING AIRLIFTED		2. DEPARTURE	AIRFIELD		3. D	ATE	4. TYPE ACI		5. ACFT SER NO.	
6. OPERATION/EXERCISE			7. DZ AND	LOCATION			8. DATE	AND TIME		
9. ACFT ALTITUDE (Feet)	10. ACFT SP	EED (Knots)	11. DZ ELEVAT	ON (Feet)		12. SURFACE WIN	D\$ (Knots)	13. VISI	BILITY (Feet/Miles)	
400 AGL	130)	11. DZ ELEVATION (335 ASL		Ì	5 Knot	(Clear		
				7						
111.	·			CARGO						
23. TYPE LOAD AND WEIGHT		d iaw (tmitoin) 0-500-3/	AVAIR No.)	25. AERIAL DELIVERY				YSTEM USED		
		3C7-1-11		DŲAL	RAIL	X CDS REI	EASE GATE	OTHER	(Explain)	
CDS	FM 1	0-550		NO. PLATF	ORMS	NO. CO	ITAINERS	N	on-CVR	
875 LBS	TO 1	3C7-22-7	1			4	4	Si	ngle Stick	
26. TYPE PLATFORM/AIR- DROP CONTAINER		PARACHUTE NUMBER		RACTION/RE- PARACHUTE		29. LENGTH O LINE	F REEFING		SITION OF LOAD IN CRAFT	
A-22	1 1 3	K G-12E	. 60 1	Inch Pilo	\	l N	/A		FSN 488	
H-22	1 1 2	V O-17E	00-	men Phe	ル	11	/ /1	1	2 of 4	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This load contained replicated stinger rounds. It was the third load to exit the aircraft. After the load exited, the G-12E was not pulled off the load. Because it was dark, I could not tell if the pilot parachute had inflated. The load was destroyed. At the impact site, the G-12 was off the load with about 20 feet of suspension lines out. The pilot parachute was lying next to the load with the deployment line wrapped around the load and caught on one corner. Inspection of the pilot parachute revealed no damage. The deployment line had several burn marks where it apparently came in contact with the A-22 container. It did not appear that the load had rolled over the deployment line on impact.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The pilot parachute failed to pull the G-12 off the load. While exiting, the load must have tumbled prior to the G-12 coming off the load. This caused the deployment line to wrap around the load rendering the pilot parachute useless.

CONTINUED ON NEXT PAGE

ANALYSIS: 7

WHAT WAS THE MALFUNCTION?

68-inch pilot parachute did not deploy the G-12.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Possible load tumble causing the parachute to entangle with the load.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Determine if single or double A-22 containers.

I.				SENERAL						
1. UNIT BEING AIRLIFTED	,	2. DEPARTUR	E AIRFIELD		3. DA	TE	4. TYP	E ACFT	•	5. ACFT SER NO.
							C-	-130	Ε	
6. OPERATION/EXERCISE			7. DZ AN	DLOCATION			8.	DATE A	AND TIME	
9. ACFT ALTITUDE (Feet)	10. ACFT SF	, , , ,		TION (Feet)	1.	2. SURF	ACE WINDS (Kno	ts)	13. VISIE	BILITY (Feet/Miles)
425	1	30	4	35		8 Kı	nots at 260)	1	5 MILES
										
111.				CARGO						
23. TYPE LOAD AND	24. RIGGE	D IAW (TM/TO/	NAVAIR No.)	25.			AEDIAL DELIVED	V CVCT	T. S. A. LUC E. D.	
WEIGHT				1		, ,	AERIAL DELIVER	1 2121	EM OSED	
	EM	10.500.0) /	DUA	L RAIL		CDS RELEASE G	ATE	OTHER	(Explain)
A-22 CDS	1	10-500-3		NO. PLATE	ORMS		NO. CONTAINER	\$	Nor	n CVR
1050 lbs	10	13C7-1-1	11	N/	4		1		Non	n Breakaway
26. TYPE PLATFORM/AIR- DROP CONTAINER		PARACHUTE NUMBER		CTRACTION/RE	-		9. LENGTH OF REEFING LINE			ITION OF LOAD IN
			•							
Δ_22		12E	1	NΙΛ		1	NΙΛ		I ES	3 617

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Static line reriever engaged for 1 second at green light. 80 pound safety tie and type 26 nylon release gate were not cut. Load failed to exit plane. Emergency procedures were initiated with no damage to load or aircraft.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Post mission inspection of static line retriever was retested. The static line retriever was engaged. The micro switch on the winch activated after one second. The spring cup was dislodged from its track. The spring was bent. Maintenance performed a further investigation on the winch. There was indication of a worn cup and tract. The winch was impounded, PQDR/MDR, and sent to the company for product rework. Waiting for the results from the company. The winch was replaced on the aircraft. All winches were inspected on all aircraft. This winch seems to be an isolated incident.

CONTINUED ON NEXT PAGE

ANALYSIS: 8

WHAT WAS THE MALFUNCTION?

- 1. Safety tie and release gate were not cut.
- 2. Load did not exit.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Aircraft equipment failure (winch).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Implement more strigent inspection procedurse (brake test).

					Z	,							
I.				GE	NER/	AL							
1. UNIT BEING AIRLIFTED		2. DEPARTURE	AIR	FIELD		3. [ATE		4.	TYPE ACFT		5. ACFT SER	Ю.
6. OPERATION/EXERCISE				7. DZ AND I	OCATI	ON				8. DATE			
9. ACFT ALTITUDE (Feet) 800 Feet AGL	10. ACFT SP 130	EED (Knots) Knots		. dz elevatio 1424 Fe			12. St	JRFACE WII	nos (Caln			BILITY (Feeti M + Miles	les)
						,					1		_
44					<u></u>	_							=
III. 23. TYPE LOAD AND	24 RIGGE	D IAW (TM/TO/N	AVA	-	CARG	U							_
WEIGHT	24. 111002	o in we (Thirt of the	~*^	111 140.7	25.			AERIAL	DEL	VERY SYST	EM USEC)	
CDC			1207 1 11				CDSR	ELEAS	E GATE	OTHER	(Explain)		
CDS							s	NO. CC	NTAI	NERS			
1591 Lbs	Ch	napter 8	pter 8				1						
26. TYPE PLATFORM/AIR- DROP CONTAINER		PARACHUTE NUMBER		28. SIZE EXTI LEASE P	SIZE EXTRACTION/RE- LEASE PARACHUTE 29. LENGTH OF REEFIN LINE				REEFING 30. POSITION C		ITION OF LOAD	IN	
			١	68 Inc	h Pil	lot	-				Gat	e F.S. 52	l
A-22	G-1	12E (1) Parachute NA									ey F.S. 5		
At green light, the guillotine knife cu exited the aircraft, terminal which was sustained broken v	t the gate, the stati as still at	e, the susp ic line retri	en iev	d pulley ver cable	sepa was	arated :	fron I sep	n the pi parated	ulle l fro	y clevi om the o	s. Aft quick	er the loa -disconne	
32. CAUSE OF MAL	FUNCTIO	N/FAILURE	C (I	f more spa	ace is	needed	, cor	ntinue or	ı re	verse.)			
The quick-disconding stress on the retrieve tension was remove suspend pulley broadless.	ever cabl ved from	le allowing the cable	g tl fo	he quick llowing	-dise	conne gate cu	ct to	open a e retrie	and ever	releas winch	e the o	cable. Or	ce
									_				

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ANALYSIS: 9

WHAT WAS THE MALFUNCTION?

Incident

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Angle below minimum with pulley and gate.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Gate should be rigged forward.

1. UNIT BEING AIRLIFTED 2. DEPARTURE AIRFIELD 3. DATE $C-130E$ 5. ACFT SER NO. $C-130E$ 6. OPERATION/EXERCISE 7. DZ AND LOCATION 8. DATE AND TIME												
S. ACFT ALTITUDE (Feet) 6. OPERATION/EXERCISE 10. ACFT SPEED (Knots) 13. U. SURFACE WINDS (Knots) 7 + CARGO 23. TYPE LOAD AND WEIGHT FM 10-500-3/ TO 13C7-1-11	l	···	•		NERAL							
9. ACFT ALTITUDE (Feet) 650 AGL 130 11. DZ ELEVATION (Feet) 372 350/4 7+ CARGO 24. RIGGED IAW (TM/TO/NAVAIR No.) TO 13C7-1-11 Chapter 9 26. TYPE FLATCORM-AIR A-22 26 HV N/A N/A N/A ST 617 SI. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) The gate failed to cut. Retriever ran until the slack was removed then stopped, failing to break the 80 lb. Pulley rigged at FS 617. No damage. 10. ACFT SURFACE WINDS (Knots) 372 350/4 7+ CARGO 25. AERIAL DELIVERY SYSTEM USED DUAL RAIL X COS RELEASE GATE OTHER (Explain) NO. CONTAINERS 30. POSITION OF HER (Explain) N/A FS 617 N/A N/A FS 617 SI. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) The gate failed to cut. Retriever ran until the slack was removed then stopped, failing to break the 80 lb. Pulley rigged at FS 617. No damage. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) On the ground the retriever ran correctly until the cable got to the horizontal to slightly higher position. All preflight inspections were conducted correctly. Investigation revealed rewind limit	1. UNIT BEING AIRLIFTED	2. DEP	ARTURE AI	RFIELD		3. DA	TE				5. ACFT SER	10.
CARGO 23. TYPE LOAD AND WEIGHT CDS X 3 TO 13C7-1-11 TOTAL 3095 Chapter 9 24. RIGGED IAW (IMITOINAVAIR No.) CDS X 3 TO 13C7-1-11 Chapter 9 25. AERIAL DELIVERY SYSTEM USED DUAL RAIL X CDS RELEASE GATE OTHER (Explain) NO. PLATFORMS NO. CONTAINERS 3 TOTAL 3095 Chapter 9 26. TYPE PLATFORMAIR AND NUMBER A-22 26 HV N/A N/A FS 617 St. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) This was a 3-bundle CDS w/CVR, left stick, using the right static line retriever (Western Gear). The gate failed to cut. Retriever ran until the slack was removed then stopped, failing to break the 80 lb. Pulley rigged at FS 617. No damage. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) On the ground the retriever ran correctly until the cable got to the horizontal to slightly higher position. All preflight inspections were conducted correctly. Investigation revealed rewind limit	6. OPERATION/EXERCISE	.		7. DZ AND I	OCATION			٦	8. DATE	AND TIME	1	
TOTAL 3095 CARGO 24. RIGGED IAW (TMITOIMAVAIR No.) FM 10-500-3/ CDS X 3 TO 13C7-1-11 Chapter 9 26. Type parachute APO CONTAINER 27. Type parachute APO CONTAINER 27. Type parachute APO CONTAINER 26. HV N/A N/A N/A FS 617 SI. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) This was a 3-bundle CDS w/CVR, left stick, using the right static line retriever (Western Gear). The gate failed to cut. Retriever ran until the slack was removed then stopped, failing to break the 80 lb. Pulley rigged at FS 617. No damage. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) On the ground the retriever ran correctly until the cable got to the horizontal to slightly higher position. All preflight inspections were conducted correctly. Investigation revealed rewind limit	9. ACFT ALTITUDE (Feet)	10. ACFT SPEED (Kno	ots) 1	1. DZ ELEVATIO	DN (Feet)	12	2. SURFACE WIN	DS (K.	nots)	13. VISI	BILITY (Feet/M	iles)
24. RIGGED IAW (TMITOINAVAIR No.) FM 10-500-3/ CDS X 3 TO 13C7-1-11 Chapter 9 25. AERIAL DELIVERY SYSTEM USED DUAL RAIL X CDS RELEASE GATE OTHER (Explain) TOTAL 3095 Chapter 9 26. TYPE PLATFORM/AIR AND NUMBER 27. TYPE PARACHUTE AND NUMBER 28. SIZE EXTRACTION/RE- LEASE PARACHUTE LEASE PARACHUTE N/A N/A FS 617 S1. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) This was a 3-bundle CDS w/CVR, left stick, using the right static line retriever (Western Gear). The gate failed to cut. Retriever ran until the slack was removed then stopped, failing to break the 80 lb. Pulley rigged at FS 617. No damage. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) On the ground the retriever ran correctly until the cable got to the horizontal to slightly higher position. All preflight inspections were conducted correctly. Investigation revealed rewind limit	650 AGL	130		372			350)/4		7	7+	
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FM 10-500-3/ CDS X 3 TO 13C7-1-11 Chapter 9 26. Type Platform. And Number 27. Type Platform. And Number 28. Size extraction/re- Lease Parachute Lease Parac	· · · · · · · · · · · · · · · · · · ·				CARGO							_
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26. TYPE PLATFORM AIR. 27. TYPE PARACHUTE AND NUMBER 28. SIZE EXTRACTION/RE-LEASE PARACHUTE 29. LENGTH OF REEFING 30. POSITION OF LOAD IN AIRCRAFT 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) This was a 3-bundle CDS w/CVR, left stick, using the right static line retriever (Western Gear). The gate failed to cut. Retriever ran until the slack was removed then stopped, failing to break the 80 lb. Pulley rigged at FS 617. No damage. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) On the ground the retriever ran correctly until the cable got to the horizontal to slightly higher position. All preflight inspections were conducted correctly. Investigation revealed rewind limit		1		11	NO. PLATE	ORMS	l	ITAIN	IERS	1		
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ANALYSIS: 10

WHAT WAS THE MALFUNCTION?

The static line retriever failed to cut the gate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Western gear (brake tests) (recurring problem).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Brake test on Western gear.

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9. ACT ALTITUDE (Feet) 12. OF FEET AGL 13. Knots 1424 Feet MSL 10 @ 90 13. VISIBILITY (Feet/Mires) 1424 Feet MSL 10 @ 90 13. SMIles TO 130 Knots 1424 Feet MSL 10 @ 90 14. SMILES TO 130 Knots 1424 Feet MSL 10 @ 90 15. Miles TO 130 Knots 16. ACRGO 17. TYPE LOAD AND WILGHT 18. TO 13C7-1-11 19. PAITORMAIN NO. PAATGARMS 10. CONTAINER 10. PAATGARMS 10. PA	1.			GE	NERAL							
9. ACST ALTITUDE (Feet) 1200 Feet AGL 130 Knots 11. DZ ELEVATION (Feet) 1200 Feet AGL 130 Knots 1424 Feet MSL 10 @ 90 13. VISIBILITY (Feetimine) 5 Miles CARGO 23. TYPE LOAD AND WEIGHT FM 10-500-3/ CDS 1591 lbs Water Barrel x 4 Chapter 8 26. TYPE PLATFORMALIE 27. TYPE PARACHUTE LEASE PARACHUTE LINE DEVILOR OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.	1. UNIT BEING AIRLIFTED	2. DEPA				3. DA	TE	i			5. ACFT SER NO.	
III. CARGO 13. TYPE LOAD AND WEIGHT FM 10-500-3/ TO 13C7-1-11 Chapter 8 22. TYPE PARACRUTE AND NUMBER 24. RIGGED IAW (IMITOIMAVAIR NO.) FM 10-500-3/ TO 13C7-1-11 Chapter 8 25. AERIAL DELIVERY SYSTEM USED DUAL RAIL X CDS RELEASE GATE OTHER (Explain) TO 13C7-1-11 Chapter 8 26. First Prior Paracrute FAID NUMBER 27. TYPE PARACRUTE AND NUMBER 28. SIZE EXTRACTION/RE EAST PARACRUTE LINE FM 10-500-3/ TO 13C7-1-11 Chapter 8 29. LENGTH OF REEFING A-22 G-12E (1) Parachute N/A Gate F.S. 577 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.	6. OPERATION/EXERCISE					OCATION				8. DATE AND TIME		
III. CARGO 23. TYPE LOAD AND WEIGHT PAIN (TMITOMAVAIR No.) FM 10-500-3/ CDS 1591 lbs TO 13C7-1-11 NO. PLATFORMS NO. CONTAINERS Water Barrel x 4 Chapter 8 26. TYPE PLATFORM.AIR. 27. TYPE PARACHUTE LEAST PARACHUTE LEAST PARACHUTE LEAST PARACHUTE LEAST PARACHUTE NO. PLATFORM SINC. CONTAINERS A-22 G-12E (1) Parachute N/A Gate F.S. 577 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.								•			·	
22. RIGGED IAW (IMITOINAVAIR No.) FM 10-500-3/ CDS 1591 lbs Water Barrel x 4 Chapter 8 24. Type Platformair. DROP CONTAINER 27. Type Platformair. AND NUMBER 28. SIZE EXTRACTION RE- LEASE PARACHUTE AND NUMBER 28. SIZE EXTRACTION RE- LEASE PARACHUTE A-22 G-12E (1) Parachute 29. LENGTH OF REEFING A-22 ROPE OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.	1200 Feet AGL	130 Knot	S	1424 F	eet MS	L		10 @ 90			5 Miles	
28. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11 Water Barrel x 4 Chapter 8 20. Type platformair DROP CONTAINER 21. Type platformair And number 22. Type platformair 68-Inch Pilot Parachute 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) 33. Description of the (£-plan) 34. Description of the (£-plan) 35. AERIAL DELIVERY SYSTEM USED DUAL RAIL X COS RELEASE GATE NO. PLATFORMS NO. CONTAINERS NO. CONTAINERS 36. PICH (16 plan) 36. PICH (16 plan) 37. POPE PRACHUTE Pulley F.S. 617 Gate F.S. 577 36. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.			-		ᅺ							
TO 13C7-1-11 Water Barrel x 4 Chapter 8 22. Type parachute ADDIO ON MALFUNCTION/FAILURE / DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 22. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.	114.				ARGO			,				
CDS 1591 lbs Water Barrel x 4 Chapter 8 TO 13C7-1-11 TO 13C7-1-1 TO 13C7-1 T		24. RIGGED IAW (TA	DIAW (TMITOINAVAIR No.)					AERIAL DELI	VERY SYST	TEM USED		
Water Barrel x 4 Chapter 8 26. Type parachute 27. Type parachute 28. Size extractionnes. 129. Length of refering 130. Position of Load in ARCRAFT 29. Length of Refering 130. Position of Load in ARCRAFT 29. Length of Refering 130. Position of Load in ARCRAFT 29. Length of Refering 130. Position of Load in ARCRAFT 29. Length of Refering 130. Position of Load in ARCRAFT 29. Length of Refering 130. Position of Load in ARCRAFT 29. Length of Refering 130. Position of Load in ARCRAFT 29. Length of Refering 130. Position of Load in ARCRAFT 29. Length of Refering 29. Length o		FM 10-	500-3/	,	DUAL	RAIL	X	CDS RELEAS	EASE GATE		R (Explain)	
28. TYPE PLATFORM AIR DROP CONTAINER 27. TYPE PARACHUTE 68-Inch Pilot Parachute 68-Inch Pilot Parachute N/A Gate F.S. 577 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.	CDS 1591 lbs	1591 lbs TO 13C7-1-				ORMS	Γ					
A-22 G-12E (1) Parachute M/A Gate F.S. 577 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.	Water Barrel x 4	Chapter	8					1				
A-22 G-12E (1) Parachute N/A Gate F.S. 577 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.		27. TYPE PARACHU AND NUMBER	TE	28. SIZE EXT LEASE P	RACTION/RE				EFING			
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.				68-Inc	ch Pilot					Pul	ley F.S. 617	
Upon green light, the right retriever winch activated for approximately 1.5 seconds and the gate failed to cut. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.	A-22	G-12E (1)	Parachute			N/A			Gate F.S. 577		
Inspection showed that the spring retainer cup was not fully seated in the hinge plate causing the premature cutoff.												
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ANALYSIS: 11

WHAT WAS THE MALFUNCTION?

Static line retriever failed to cut gate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Static line retriever continuing problem or improper checklist procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Perform proper checklist procedures brake test on Western gear.

6. OPERATION/EXERCISE 9. ACFT ALTITUDE (Feet) 1173 Feet AGL 130 K1 III. 23. TYPE LOAD AND WEIGHT FM). DEPARTURE A		NERAL							
9. ACFT ALTITUDE (Feet) 1173 Feet AGL 10. ACFT SPEE 130 K1 1173 Feet AGL 10. ACFT SPEE 130 K1 118. 23. TYPE LOAD AND WEIGHT CDS 1327 lbs Water Barrel x 4 26. TYPE PLATFORM AIR DROP CONTAINER A-22 G-121 31. DESCRIPTION OF MALFUNCTION Upon green light, the right safety tie did not break and 32. CAUSE OF MALFUNCTION The beaded chains were witriever timer was within lim ground. It was later found to	2. DEPARTURE AL	RFIELD								
9. ACFT ALTITUDE (Feet) 1173 Feet AGL 110. ACFT SPEE 130 K1 1173 Feet AGL 110. ACFT SPEE 130 K1 100. ACFT SPEE 100 K1 100 ACFT SPEE 100 ACFT			2. DEPARTURE AIRFIELD 3. DA							
9. ACFT ALTITUDE (Feet) 1173 Feet AGL 130 K1 10. ACFT SPEE 130 K1 24. RIGGED II FM TO Chap 26. TYPE PLATFORM AIR DROP CONTAINER 27. TYPE PAI AND NU 31. DESCRIPTION OF MALFUNCTION Safety tie did not break and 32. CAUSE OF MALFUNCTION The beaded chains were with triever timer was within liming ground. It was later found to								C-13		<u> </u>
III. 23. TYPE LOAD AND WEIGHT CDS 1327 lbs Water Barrel x 4 26. TYPE PLATFORM/AIR DROP CONTAINER A-22 G-12 31. DESCRIPTION OF MALFUNCTION Safety tie did not break and striever timer was within lim ground. It was later found to the safety tie did to the safety tie did to the safety tie was within liming ground. It was later found to the safety tie did to the safety tie was within liming ground. It was later found to the safety tie did to the safety tie was within liming ground.		7. DZ AND I	OCATION					8. DATE	AND TIME	
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CDS 1327 lbs Water Barrel x 4 26. TYPE PLATFORM AIR DROP CONTAINER A-22 G-12 31. DESCRIPTION OF MALFUNCTION Safety tie did not break and safety tie did not break and triever timer was within lim ground. It was later found to	10-500-3/	,	DUAL	RAIL	X	CDS REL	EASE	GATE	OTHER	(Explain)
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Upon green light, the right safety tie did not break and 32. CAUSE OF MALFUNCTION The beaded chains were witriever timer was within lim ground. It was later found to		LEASE P	ARACHUTE			INE	NLL	ring		RAFT
Upon green light, the right safety tie did not break and 32. CAUSE OF MALFUNCTION The beaded chains were witriever timer was within lim ground. It was later found to		68-I	nch Pilo	ot					Pull	ley F.S. 530
Upon green light, the right safety tie did not break and 32. CAUSE OF MALFUNCTION The beaded chains were witriever timer was within lim ground. It was later found to	E(1)	Parachute			N/A				Gate F.S. 517	
Upon green light, the right safety tie did not break and 32. CAUSE OF MALFUNCTION The beaded chains were witriever timer was within lim ground. It was later found to		(DAMA CE)	NCUBBE	D. Ce	•		٠.			
The beaded chains were wi triever timer was within lim ground. It was later found t										
triever timer was within lim ground. It was later found t	/FAILURE (If more sp	ace is nee	eded,	conti	inue on	rev	erse.)		
	its during a hat the ret	aircraft pr riever slij	eflight.	The	mal	function	on	was d	uplica	ted on the
					_		_			

ANALYSIS: 12

WHAT WAS THE MALFUNCTION?

Retriever did not break the safety tie.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Clutch out of adjustment (Western gear).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

- 1. Recommend more testing on the Western gear.
- 2. Review data history on problems with Western gear.
- 3. QDR.

1. UNIT BEING AIRLIFTED											
. UNIT BEING AIRLIFTED				NERAL							
1. UNIT BEING AIRLIFTED		2. DEPARTURE AI	RFIELD		3. DAT	Έ			PE ACFT		5. ACFT SER NO.
			1				L		C-1301	_	
. OPERATION/EXERCISE			7. DZ AND	LOCATION				8.	DATE AN	DIIME	
. ACFT ALTITUDE (Feet)	10. ACFT SPEE	D (Knots)	1. DZ ELEVATI	ON (Feet)	12.	. SUR	ACE WIND	(Kno	its)	13. VISII	BILITY (Feet/Miles,
650 AGL	1	30	550				190/03			Unre	estricted
				7_							
11.			ı	CARGO							
3. TYPE LOAD AND WEIGHT	24. RIGGED	AW (TMITOINAV	AIR No.)	25.			AERIAL DE	LIVER	RY SYSTEM	N USED	
	FM 1	10-500-3/		DUAL	RAIL X CDS		CDS RELE	CDS RELEASE GATE		OTHER	(Explain)
CDS/	TO 1	3C7-1-11		NO. PLATE	ORMS		NO. CONT	AINER	25		
1050 Lbs	Chap	ter 9					1				
26. TYPE PLATFORM/AIR- DROP CONTAINER	27. TYPE PA AND NU	RACHUTE IMBER	28. SIZE EXT LEASE P	RACTION/RE- ARACHUTE			ENGTH OF	REEFII	NG 3		TION OF LOAD IN
A-22	26 H	V	N/A			N/A				FS 530	
32 CAUSE OF MAL	FUNCTION	FAILUDE (If more en	oco is noo	dod o	onti	nuo on r	ovor	eo)		
Maintenance inspectors to slip when a lo	pected the	retriever a	and found	d that the	e clut	ch	was out	of	adjust		_
Maintenance insp	pected the	retriever a	and found	d that the	e clut	ch	was out	of	adjust		_
Maintenance insp	pected the	retriever a	and found	d that the	e clut	ch	was out	of	adjust		_
Maintenance insp	pected the	retriever a	and found	d that the	e clut	ch	was out	of	adjust		_
Maintenance insp	pected the	retriever a	and found	d that the	e clut	ch	was out	of	adjust		_
-	pected the	retriever a	and found	d that the	e clut	ch	was out	of	adjust		_

ANALYSIS: 13

WHAT WAS THE MALFUNCTION?

Retriever did not break the safety tie.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Clutch out of adjustment (Western Gear).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

- 1. Recommend more testing on Western gear.
- 2. QDR (MDR) report to AMC
- 3. Review data history on problems with Western gear.

										_
1.	,			NERAL						
1. UNIT BEING AIRLIFTED		2. DEPARTURE All	3. DATE			4. TYPE AC		5. ACFT SER NO.		
6. OPERATION/EXERCISE		7. DZ AND LOCATION					8. DATE AND TIME			
9. ACFT ALTITUDE (Feet)	10. ACFT SPI	· · · · · · · · · · · · · · · · · · ·	1. DZ ELEVATI		12. 5	URFACE WIND:			IBILITY (Feet/Miles))
475 Feet	130	KIAS	142	0	<u> </u>	100/3	3		Unlimited	
				7						=
III. 23. TYPE LOAD AND	24 BIGGE	DIAW (TMITOINAV		CARGO						
WEIGHT	24. RIGGE	DIAW (IMITOINAV	AIR NO.)	25.		AERIAL DE	LIVERY SY	STEM USE	USED	
				DUAL RAI	. [2	X CDS RELE	ASE GATE	OTHER	l (Explain)	
	FM	10-500-3/		NO. PLATFORM	ıs	NO. CONT	AINERS			
CDS/w CVR	ТО	13C7-1-11			-	2				
26. TYPE PLATFORM/AIR- DROP CONTAINER		ARACHUTE NUMBER		RACTION/RE- ARACHUTE	2	9. LENGTH OF	REEFING		SITION OF LOAD IN	
			•					Bur	ndles Double	e
NA		G-12E	N	ΙA		NA		Stic	ck @ FS 73	37
right gate failed to 737. The 80 lb saf malfunction process. 32. CAUSE OF MALE Suspected loose gas contributed to this	ety tie bedure was	oroke on the as accomplis N/FAILURE (1) the knives no	release hed. If more space of being s	knife but the	ne g	ntinue on r	to cut	. Gate	failed to cu	t
		CONTI	NUED	ON NEX	Т Р	PAGE	•			

ANALYSIS: 14

WHAT WAS THE MALFUNCTION?

Right failed to cut

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Too much slack in gate (right).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper rigging procedures are followed.

l.											
				NERAL							
I. UNIT BEING AIRLIFTED		2. DEPARTURE	AIRFIELD		3. DA1	E	4.	TYPE AC		5. ACFT SER NO.	
								C-13			
5. OPERATION/EXERCISE			7. DZ AND	OCATION				8. DATI	AND TIME		
								<u> </u>			
800 Feet AGL 10. ACFT SPEED (Knots)			11. DZ ELEVATION 1424 Fee		12	. surface v Ca		Knots)		BILITY (FeetiMiles) Jnrestricted	
800 Feet AGL	140 K	liots	1424 1760	- WISL		Ca	1111			Jinesurcieu	
				<u> </u>							
II.		·		CARGO							
3. TYPE LOAD AND WEIGHT	24. RIGGED	NAW (TMITOINA	VAIR No.)	25.		AERI	AL DEL	VERY SY	STEM USEC	TEM USED	
Heavy Equip-	1			X DUAL	RAIL	CDS	RELEAS	E GATE	OTHER	(Explain)	
ment	FM 10	-512/		NO. PLATFO			ONTA		┪~~~	(=::,p:=:::)	
3,150 Lbs	TO 13	C7-1-8		1							
· .			1	1					1		
26. TYPE PLATFORM/AIR- DROP CONTAINER		PE PARACHUTE ID NUMBER 28. SIZE EXTRACTION/R LEASE PARACHUT		ARACHUTE		29. LENGT LINE	1 OF RE			ITION OF LOAD IN	
			•			Cen	terlii	ne/			
Type V	G-1	2E/2 ·	15 Foot			57 Feet			F.S. 657		
32. CAUSE OF MAI The deadman's sides were too ti enough to allow	FUNCTIO safety tie ght. The	on/FAILURE was found	(If more sp	ace is need the forw the und	eded, vard	continue side of le of the	on rethel	verse.) oad. board	The other	ng the load	
										id.	

ANALYSIS: 15

WHAT WAS THE MALFUNCTION?

Deadman's safety tie caught under the load causing aft suspension sling to catch on load.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Rigged improperly.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

- 1. Eliminate all sharp edges/corners by properly padding.
- 2. Follow procedures for rigging mass supply load in TO 13C7-1-8.

I. 1. UNIT BEING AIRLIFTED							
1 LINIT BEING AIDLIETED		GE	NERAL				
1. OHIT BLING AIRLIFTED	2. DEPARTURI	AIRFIELD	3. DA1	re	4. TYPE ACFT MC-		5. ACFT SER NO.
6. OPERATION/EXERCISE	<u> </u>	7. DZ AND	LOCATION		8. DATE	AND TIME	
9. ACFT ALTITUDE (Feet)	10. ACFT SPEED (Knots)	11. DZ ELEVATI	ON (Feet) 12	. SURFACE WIN	DS (Knots)	13. VISII	BILITY (Feet/Miles)
1000 Feet AGL	140 Knots	123	Feet	0-3 k	Cnots	Cle	ar/98 Feet
111.			CARGO				
23. TYPE LOAD AND WEIGHT	24. RIGGED IAW (TMITOIN		25.	AERIAL	DELIVERY SYST	EM USED	
Maga Cumpler	FM 10-512/ TO 13C7-1-8		X DUAL RAIL		EASE GATE	OTHER	(Explain)
Mass Supply 7,625 Lbs	FM 10-500-2/ TO 13C7-1-5		no. platforms	NO. CO	ITAINERS	Loc 10,	eks #7, 9, 11
26. TYPE PLATFORM/AIR- DROP CONTAINER	27. TYPE PARACHUTE AND NUMBER	28. SIZE EXT LEASE P	RACTION/RE- ARACHUTE	29. LENGTH O LINE	F REEFING	30. POS	TION OF LOAD IN
Type V	G-11B/2 Ea	15-I	Foot Extr	60 I	Foot	Cen 560	ter Load/
One of the paracl	s in a 45 degree ar nutes had partially released at about 8	inflated ar	nd the other p	parachute	elongate	d but r	never in-
32. CAUSE OF MAL	FUNCTION/FAILUR	E (If more sp	ace is needed,	continue on	reverse.)		
	imer failed to ma	ke the norn	nol 12 to 16				
The M-1 release to chute connectors phase. The M-1 relock housing, can phase.	to release from the elease was inspec	e M-1 at ap ted and fou	proximately and that the s	3 second	s into the ger was d	deplo amag	yment ed inside the

CONTINUED ON NEXT PAGE

WHAT WAS THE MALFUNCTION?

Timer block malfunctioned.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. Timer block prematurely retracted keys causing the block to fall, releasing parachute connectors causing the load to hit the ground
- 2. Note: Rigger/loadmaster noted timer keys did not look fully extended and used screwdriver to adjust and extend keys on aircraft.

- 1. Perform full functional check on the release prior to installing.
- 2. Follow proper in-plane guidelines. (The aircraft is not the place to be performing functional checks.)
- 3. M-1 should have been replaced.

											_
l.			GE	NERAL							_
1. UNIT BEING AIRLIFTED		2. DEPARTURE A	IRFIELD		3. DAT	E	4.	TYPE ACF		5. ACFT SER N	0.
							1_	C-14			
6. OPERATION/EXERCISE			7. DZ AND	OCATION				8. DATE	AND TIME		
9. ACFT ALTITUDE (Feet)	10. ACFT SPE		11. DZ ELEVATI	DN (Feet)	12	. SURFACE WI				BILITY (Feet/Mil	es)
550 AGL	150	KIAS	116	3	1	350/0	004		1	2 Miles	
				7_							
11.				CARGO							=
23. TYPE LOAD AND	24. RIGGE	IAW (TMITOINA									_
WEIGHT				25.		AERIAI	DELI	VERY SYS	TEM USED)	
				DUAL	RAIL	. CDS R	ELEAS	E GATE	OTHER	(Explain)	
	FM 10)-500-2/		NO. PLATFO	ORMS	NO. CC	NTAI	NERS	1		
3060	TO 13	3C7-1-5		1							
26. TYPE PLATFORM/AIR-	27 TYPE D	ARACHUTE	T 20 5175 5YT	RACTION/RE-		29. LENGTH	00.00	EFING	20,000	ITION OF LOAD	
DROP CONTAINER		IUMBER		ARACHUTE		LINE	OF RE	EFING		CRAFT	IN
Type V	G12	2E (2)	15-F	oot		l N	ΙA			#1	
-J F									<u> </u>		
point link. The crezone. 32. CAUSE OF MAL The cover plate for properly place the Joint Airdrop Insp	FUNCTIO	N/FAILURE	(If more sp	ace is nee	ded, dered	continue o	n re	verse.)	admas	ster failed	to
							_				

ANALYSIS: 17

WHAT WAS THE MALFUNCTION?

The Type IV connector link separated from the extraction parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The loadmaster did not install the faceplate correctly and when the in-plane JAI was accomplished he failed to identify the deficiency.

- 1. Pay more attention to detail.
- 2. Follow -9 procedures.

I. 1. UNIT BEING AIRLIFTED		2. DEPARTURE		ENERAL	DATE	1	4. TYPE ACF	r	5. ACFT SER NO
I. ONIT BEING AIRLIFTED		2. DEPARTURE	AIRFIELD		DATE				S. ACFI SER NO
6. OPERATION/EXERCISE		<u> </u>	7 D7 AND	LOCATION			C-14	AND TIM	<u> </u>
. Of Ella Holle Exciterate				Location			S. SAIT	A	•
9. ACFT ALTITUDE (Feet)	10. ACFT SP	EED (Knots)	11. DZ ELEVAT	ION (Feet)	12. SU	IRFACE WIN	D\$ (Knots)	13. VIS	IBILITY (Feet/Miles
1555 Feet AGL	500	Knots	3281	MSL		5 Kno	ts	F	Restricted
				<u> </u>					
III.				CARGO					
23. TYPE LOAD AND WEIGHT	24. RIGGE	DIAW (TM/TO/N	IAVAIR No.)	25.		AERIAL	DELIVERY SYS	TEM USE)
				X DUAL RA	ıIL	. CDS REI	EASE GATE	ОТНЕЯ	(Explain)
SEE	FM 1	0-539/		NO. PLATFOR	vis	NO. CON	ITAINERS	1	
21949 LBS	TO 1	3C7-1-1	7	2					
26. TYPE PLATFORM/AIR- DROP CONTAINER		ARACHUTE NUMBER		TRACTION/RE- PARACHUTE	29	LENGTH O	F REEFING		SITION OF LOAD IN
24-Foot			28 F	oot					
Type V	G-110	C/5 EA		action		N/	A		2 of 2
The extraction pa went into the rece with the load for no lift capability.	overy ph a few sec	ase and two	vo of the fi	ve parach hutes cut a	utes o	deploye from th	ed. The p	arach aving	utes stayed the load wi
32. CAUSE OF MAI The cause for the parachutes was e parachutes to de	is malfur either mi	nction was	s that the 3	foot 2 loop	o dep	loymer	nt line for		
							_		

CONTINUED ON NEXT PAGE

WHAT WAS THE MALFUNCTION?

3-foot cluster sling was not attached to the clustering clevis.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. The Malfunction NCO did not secure area immediately (last drop of day).
- 2. The extraction system was not found until the following day.
- 3. The extraction system (D-bags, extraction line parachute including where 3-foot sling should have been) was removed from DZ prior to investigation.
- 4. All material to include 3-foot sling not accounted for.

- 1. Emphasize "proper installation of 3-foot cluster sling" on load where deployment parachutes are not all stacked together.
- 2. Follow proper malfunction investigation procedures (secure area/equipment).

1.			GI	ENERAL						
1. UNIT BEING AIRLIFTED		2. DEPARTURE	AIRFIELD		3. D/	ATE		4. TYPE A	FT	5. ACFT SER NO.
				İ				C-14	11B	
6. OPERATION/EXERCISE			7. DZ AND	LOCATION				8. DAT	E AND TIM	E
				,						
9. ACFT ALTITUDE (Feet)	10. ACFT SPE	EED (Knots)	11. DZ ELEVATI	ON (Feet)		12. SUF	FACE WIN	IDS (Knots)	13. VIS	IBILITY (Feet/Miles)
1215 AGL	150) KCAS	CAS 1175 080/10							7+NM
				77_						
111.										
23. TYPE LOAD AND	·						-			
WEIGHT	• • • • • • • • • • • • • • • • • • • •			25.			AERIAL	DELIVERY SY	STEM USE	D
				DUAL	RAIL		CDS RE	LEASE GATE	OTHER	R (Explain)
	FM	10-500-2/	/	NO. PLATE	1	NO. CO	NTAINERS	7		
Heavy/3160	ТО	13C7-1-5								
				1		_			↓ —	
26. TYPE PLATFORM/AIR- DROP CONTAINER		ARACHUTE NUMBER		RACTION/RE PARACHUTE			LENGTH C	F REEFING		SITION OF LOAD IN CRAFT
	}									
Type V	(2)) G-12E	15-1	Foot			N	/A		TA 1260
-715-	(2)	, - 122								
31. DESCRIPTION OF M	ALFUNCT	ION/FAILUR	E/ DAMAGE	INCURRE	D (if	more	space is	needed, cor	itinue on i	reverse.)

At "Green Light", the extracton parachute exited and inflated normally. The platform remained in place. The loadmaster pulled the right hand release handle twice to try and release the platform. Prior to chaining the emergency aft restraint chains, the platform broke free and released. After closing the cargo doors, the loadmaster discovered four of the right hand locks became engaged and were damaged by the platform upon exiting.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Rail shop inspected the rail section and found nothing that would hinder the release of the platform. They also inspected the sheered locks and could not find a logical reason for them to drop back into the dual rail. Possible flexing of the aircraft or by pulling the release handle twice were discussed as a possible cause.

CONTINUED ON NEXT PAGE

WHAT WAS THE MALFUNCTION?

Right hand locks did not release.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. Possible incorrect installation of the right hand locks by not ensuring control rod was seated correctly allowing locks to engage when pressure was applied.
- 2. Loadmaster failed to follow correct emergency procedures. It does not state to pull right hand cross overs twice.

- 1. Ensure maintenance installs right hand locks correctly.
- 2. Make sure loadmaster follows -1 procedures for airdrop emergencies.

1.			GE	NERAL							
1. UNIT BEING AIRLIFTED		2. DEPARTURE A	RFIELD		3. DA	TE		4. 1	C-13		5. ACFT SER NO.
6. OPERATION/EXERCISE			7. DZ AND I	OCATION					8. DATE	AND TIME	
	10. ACFT SPE		1. DZ ELEVATIO		12	. SURFA	ACE WIND				BILITY (Feet/Miles)
650 AGL	140 1	KIAS	690	Feet			210 (@	5	J	Inlimited
				7_				_			
III. 23. TYPE LOAD AND	24. RIGGED	DIAW (TMITOINAV		CARGO							
WEIGHT		· · · · · · · · · · · · · · · · · · ·	,	25.			AERIAL D	ELIN	ERY SYS	TEM USED	
	F	M 10-512/	,	X DUAL	RAIL		CDS RELE	AS	E GATE	OTHER	(Explain)
Heavy Equipment	Т	O 13C7-1	-8	NO. PLATE	ORMS		NO. CON	TAIN	IERS	1	
2600 Lbs.		Chapter 11		1						1	
26. TYPE PLATFORM/AIR- DROP CONTAINER		ARACHUTE NUMBER	28. SIZE EXT LEASE P	RACTION/RE- ARACHUTE			NGTH OF NE	REE	FING		ITION OF LOAD IN
			•								
Type V	G1	12E/2	1.	5-Foot						I	F.S. 600
The load exited no never opened. The inflate. The load d parachute, all 3-cd was not. The para	e misha lescende ord ties v	p parachute ed under on were broker	seemed e fully in n, but the	to fall b flated pa 1/4-inc	elow arach h cot	the jute vitton v	platfo with n webbi	rn o o	n after damag	an att ge. Or	empt to the mishap
32. CAUSE OF MALF When the first G-								rev	erse.)		
						_	_				
							~-				
		CONT	INUED	ON NE	XT	PA(GE				

ANALYSIS: 20

WHAT WAS THE MALFUNCTION?

The G-12E failed to fully inflate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. The weight of the load could have been the problem with using two G-12Es.
- 2. The G-12E was packed in a G-12D bag.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Get new G-12E bags.

6. OPERATION/EXERCISE 7. DZ AND LOCATION 8. DATE AND TIME 9. ACFT ALTITUDE (Feet) 10. ACFT SPEED (Knots) 145 11. DZ ELEVATION (Feet) 265 Calm 13. VISIBILITY (Feet) Calm United 145 CARGO 23. TYPE LOAD AND WEIGHT 8-FOOT FM 10-512/ Mass Supply TO 13C7-1-8 11. DZ ELEVATION (Feet) 265 LZ. SURFACE WINDS (Knots) Calm 13. VISIBILITY (Feet) Calm United AERIAL DELIVERY SYSTEM USED TO HER (Explain NO. PLATFORMS NO. CONTAINERS											
6. OPERATION/EXERCISE 7. DZ AND LOCATION 8. DATE AND TIME 9. ACET ALTITUDE (Feet) 10. ACET SPEED (Knots) 145 11. DZ ELEVATION (Feet) 265 12. SURFACE WINDS (Knots) 13. VISIBILITY (R Calm 13. TYPE LOAD AND WEIGHT 8-FOOT FM 10-512/ Mass Supply TO 13C7-1-8 1 25. AERIAL DELINERY SYSTEM USED X DUAL RAIL CDS RELEASE GATE OTHER (Explain NO. PLATFORMS NO. CONTAINERS 1 26. SYZE EXTRACTIONIRE. 129. LENGTH OF REEFING AIRCRAFT AIRCRAFT Type V 2 G-12's 15-Foot 1 of 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At the release point checklist, the extraction parachute exited normally. After approximate to 3 seconds it became evident that the parachute would not completely open. The can appeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parach opened. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the can No twist in suspension slings. No evidence of burn marks on any location. All required				ENERAL							
9. ACFT ALTITUDE (Foot) 10. ACFT SPEED (Knots) 11. DZ ELEVATION (Foot) 10. ACFT SPEED (Knots) 11. DZ ELEVATION (Foot) 10. ACFT SPEED (Knots) 112. SURFACE WINDS (Knots) 113. VISIBILITY (R Untres) 114. SURFACE WINDS (Knots) 113. VISIBILITY (R Untres) 114. SURFACE WINDS (Knots) 115. SURFACE WINDS (Knots) 116. ACFT SPEED (Knots) 117. VISIBILITY (R Untres) 118. VISIBILITY (R Untres) 119. VISIBILITY (R Untres) 119. VISIBILITY (R Untres) 110. ACFT SPEED (Knots) 120. SURFACE WINDS (Knots) 121. SURFACE WINDS (Knots) 122. AERIAL DELIVERY SYSTEM USED 123. TYPE LOAD AND WEIGHT 124. RIGGED IAW (TMITOINAVAIR NO.) 125. AERIAL DELIVERY SYSTEM USED 126. TYPE PLATFORMAIR 127. TYPE PLATFORMAIR 127. TYPE PLATFORMAIR 127. TYPE PLATFORMAIR 127. TYPE PLATFORMAIR 128. SIZE EXTRACTION RE- LEASE PARACHUTE 129. LENGTH OF REEFING 130. POSITION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) 14 the release point checklist, the extraction parachute exited normally. After approximate to 3 seconds it became evident that the parachute would not completely open. The cand appeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parach opened. The load landed 1205/12 20 yards off the DZ. 12. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) 131. DESCRIPTION of the main extraction parachutes revealed the following: Small tear in the can not wist in suspension slings. No evidence of burn marks on any location. All required	UNIT BEING AIRLIFTED	2. DEPARTURE A	IRFIELD		3. DAT	Έ		4.			5. ACFT SER NO.
9. ACFT ALTITUDE (Feet) 10. ACFT SPEED (Knots) 11. DZ ELEVATION (Feet) 265 Calm 13. VISIBILITY (Feet) 1001RA 145 145 265 Calm 13. VISIBILITY (Feet) 1001RA 145 15. CARGO 24. RIGGED IAW (TMITOINAVAIR No.) 25. AERIAL DELIVERY SYSTEM USED 25. AERIAL DELIVERY SYSTEM USED 26. TYPE PLATFORM.AIR 10. PLATFORMS NO. CONTAINERS 1 OTHER (Explain TOP) PLATFORM NO. CONTAINERS 1 OTHER (Explain TOP) PLATFORM.AIR 27. TYPE PARACHUTE 128. SIZE EXTRACTION.RE-LEASE PARACHUTE 11ME 10. PLATFORM 10. PLATF	ODERATION/EVERCICE	<u> </u>	1 2 DZ AND	LOCATION				丄			
III. 23. TYPE LOAD AND WEIGHT 8-Foot FM 10-512/ TO 13C7-1-8 1 COS RELEASE GATE OTHER (Explain) MASS Supply TO 13C7-1-8 1 COS RELEASE GATE OTHER (Explain) 26. TYPE PLATFORMS NO. CONTAINERS Type V 2 G-12's 15-Foot 1 of 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At the release point checklist, the extraction parachute exited normally. After approximato 3 seconds it became evident that the parachute would not completely open. The came appeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parach opened. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the can not wist in suspension slings. No evidence of burn marks on any location. All required	DPERA HON/EXERCISE		7. DZ AND	LOCATION					6. DAT	: AND TIM	•
III. CARGO 23. TYPE LOAD AND WEIGHT 8-Foot FM 10-512/ Mass Supply TO 13C7-1-8 27. TYPE PLATFORM AIR: 27. TYPE PARACHUTE AND NUMBER 28. SIZE EXTRACTIONIFE: 29. LENGTH OF REEFING AIRCRAFT Type V 2 G-12's 15-Foot 1 of 30. POSITION OF AIRCRAFT At the release point checklist, the extraction parachute exited normally. After approximate to 3 seconds it became evident that the parachute would not completely open. The cance appeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parach opened. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the can No twist in suspension slings. No evidence of burn marks on any location. All required					12.				(nots)		IBILITY (Feet/Miles
24. RIGGED IAW (TMITOINAVAIR No.) 8-Foot FM 10-512/ Mass Supply TO 13C7-1-8 27. TYPE PLATFORM: NO. CONTAINERS 1 28. SIZE EXTRACTION.RE: LEASE PARACHUTE Type V 2 G-12's 15-Foot 1 of 21. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At the release point checklist, the extraction parachute exited normally. After approximate to 3 seconds it became evident that the parachute would not completely open. The cance appeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parach opened. The load landed 1205/12 20 yards off the DZ. 28. SIZE EXTRACTION.RE: 29. LENGTH OF REEFING 30. POSITION OF AIRCRAFT 1 of 1 o	001RA	145		265		(Caln	1			Unrestricted
24. RIGGED IAW (TMITOINAVAIR No.) 8-Foot FM 10-512/ Mass Supply TO 13C7-1-8 25. AERIAL DELIVERY SYSTEM USED WEIGHT NO. PLATFORMS NO. CONTAINERS 1 27. TYPE PLATFORM.AIR AIR AND NUMBER 27. TYPE PARACHUTE LEASE PARACHU				77_							
8-Foot FM 10-512/ Mass Supply TO 13C7-1-8 27. Type Platformair. 27. Type Parachute Lease Parachute Lease Parachute Lease Parachute Lease Parachute Lease Parachute Lease Parachute would not completely open. The came appeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parachute pened. The load landed 1205/12 20 yards off the DZ. 25.				CARGO							
Mass Supply TO 13C7-1-8 1 27. TYPE PARACHUTE AND NUMBER 28. SIZE EXTRACTION/RE-LEASE PARACHUTE LEASE PARACHUTE Type V 2 G-12's 15-Foot 1 of DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At the release point checklist, the extraction parachute exited normally. After approximate 3 seconds it became evident that the parachute would not completely open. The can appeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parach opened. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the car No twist in suspension slings. No evidence of burn marks on any location. All required		24. RIGGED IAW (TM/TO/NA)	VAIR No.)	25.			AERIA	L DELI	VERY SY	STEM USEI	D
Mass Supply TO 13C7-1-8 1 26. TYPE PLATFORM.AIR. 27. TYPE PARACKUTE AND NUMBER Type V 2 G-12's 15-Foot 1 of 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At the release point checklist, the extraction parachute exited normally. After approximate to 3 seconds it became evident that the parachute would not completely open. The candappeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parachappeared. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the car No twist in suspension slings. No evidence of burn marks on any location. All required				X DUAL	RAIL		CDS	ELEAS	E GATE	OTHER	R (Explain)
26. TYPE PLATFORMAIR. 27. TYPE PARACHUTE AND NUMBER 28. SIZE EXTRACTION/RE- LEASE PARACHUTE 29. LENGTH OF REEFING ANCRAFT 30. POSITION OF ARCRAFT Type V 2 G-12's 15-Foot 1 of 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At the release point checklist, the extraction parachute exited normally. After approximate 3 seconds it became evident that the parachute would not completely open. The candappeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parachappeared. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the car No twist in suspension slings. No evidence of burn marks on any location. All required				NO. PLATFO	RMS		NO. C	NTAI	NERS	7	
Type V 2 G-12's 15-Foot 1 of 31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At the release point checklist, the extraction parachute exited normally. After approximate to 3 seconds it became evident that the parachute would not completely open. The candappeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parachappeared. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the car No twist in suspension slings. No evidence of burn marks on any location. All required	Mass Supply	TO 13C7-1-8		1						1	
At the release point checklist, the extraction parachute exited normally. After approximate 3 seconds it became evident that the parachute would not completely open. The candappeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parachappeared. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the car No twist in suspension slings. No evidence of burn marks on any location. All required			28. SIZE EXT LEASE P	RACTION/RE-				OF RE	FING		SITION OF LOAD IN
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At the release point checklist, the extraction parachute exited normally. After approximate 3 seconds it became evident that the parachute would not completely open. The candappeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parachappeared. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the car No twist in suspension slings. No evidence of burn marks on any location. All required											
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At the release point checklist, the extraction parachute exited normally. After approximate to 3 seconds it became evident that the parachute would not completely open. The candappeared to be partly opened and rotating at that time the right hand locks were release the load exited the aircraft (very slowly). It was observed that the main recovery parachapened. The load landed 1205/12 20 yards off the DZ. 32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Inspection of the main extraction parachutes revealed the following: Small tear in the car No twist in suspension slings. No evidence of burn marks on any location. All required											1 01 1
Inspection of the main extraction parachutes revealed the following: Small tear in the car No twist in suspension slings. No evidence of burn marks on any location. All required					•		-		ĺ		reverse.)
No twist in suspension slings. No evidence of burn marks on any location. All required	At the release point to 3 seconds it becappeared to be parthe load exited the	at checklist, the ext came evident that t ctly opened and ro caircraft (very slov	raction pa he parach tating at t vly). It w	arachute nute wou hat time as obser	exited ld not the red to the red	ed not corigh	orm omp at ha	ally. letel ad lo	Afte y ope	r appron en. The vere re	oximately 2 e canopy eleased and
	At the release point to 3 seconds it becappeared to be particularly be appeared. The load	at checklist, the exteame evident that the extent opened and room aircraft (very slow landed 1205/12 2	raction parach tating at t vly). It w 0 yards o	arachute nute wou hat time as observ off the D2	exited the red to the	ed not corigh	orm omp ot han the	ally. letel nd lo mair	Afte y ope ocks v	r appron en. The vere re	oximately 2 e canopy eleased and
CAUSE: Undetermined.	At the release point to 3 seconds it becappeared to be particle load exited the opened. The load 2. CAUSE OF MALF Inspection of the male	at checklist, the extrame evident that the trily opened and row aircraft (very slow landed 1205/12 2 cunction/failure main extraction parsion slings. No ev	raction parach the parach tating at t vly). It w 0 yards o (If more sp achutes re idence of	arachute nute wou hat time ras obser off the Di	exited the record the record to the record t	ed not coright	inue o	ally. letel nd lo main	Afterly open cocks we reco	er appro en. The vere re overy p	e canopy eleased and parachutes
	At the release point to 3 seconds it becappeared to be particular the load exited the opened. The load 2. CAUSE OF MALF Enspection of the many twist in suspensivere broken. Noth	at checklist, the extrame evident that the trily opened and room aircraft (very slow landed 1205/12 2 cunction/failure main extraction parasion slings. No evidence unusual observants and the contraction of the contraction parasion slings.	raction parach the parach tating at t vly). It w 0 yards o (If more sp achutes re idence of	arachute nute wou hat time ras obser off the Di	exited the record the record to the record t	ed not coright	inue o	ally. letel nd lo main	Afterly open cocks we reco	er appro en. The vere re overy p	e canopy eleased and parachutes
	At the release point to 3 seconds it becappeared to be particular the load exited the opened. The load 2. CAUSE OF MALF Enspection of the many twist in suspensivere broken. Noth	at checklist, the extrame evident that the trily opened and room aircraft (very slow landed 1205/12 2 cunction/failure main extraction parasion slings. No evidence unusual observants and the contraction of the contraction parasion slings.	raction parach the parach tating at t vly). It w 0 yards o (If more sp achutes re idence of	arachute nute wou hat time ras obser off the Di	exited the record the record to the record t	ed not coright	inue o	ally. letel nd lo main	Afterly open cocks we reco	er appro en. The vere re overy p	e canopy eleased and parachutes
	At the release point to 3 seconds it becappeared to be particular the load exited the opened. The load 2. CAUSE OF MALF Enspection of the many twist in suspensivere broken. Noth	at checklist, the extrame evident that the trily opened and room aircraft (very slow landed 1205/12 2 cunction/failure main extraction parasion slings. No evidence unusual observants and the contraction of the contraction parasion slings.	raction parach the parach tating at t vly). It w 0 yards o (If more sp achutes re idence of	arachute nute wou hat time ras obser off the Di	exited the record the record to the record t	ed not coright	inue o	ally. letel nd lo main	Afterly open cocks we reco	er appro en. The vere re overy p	e canopy eleased and parachutes

ANALYSIS: 21

WHAT WAS THE MALFUNCTION?

The load landed off the DZ.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Slow exit.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not given.

III. 23. TYPE LOAD AND WEIGHT 24. HMMWV with Howitzer	2. DEPARTURE AND AND PARTURE AND NUMBER 12. DEPARTURE AND	7. DZ AND I 1. DZ ELEVATI 529 AIR No.)		2. SURFACE WI 4-7 K AERIAI	NDS (Knots)	7 AND TIME 13. VISI 7	BILITY (FeetiMiles) 7 Miles
N. 23. TYPE LOAD AND WEIGHT HMMWV with Howitzer 26. Type Platform/air-Drop Container 32-Foot Type V	CFT SPEED (Knots) 138 Knots 138 Knots 138 Knots 138 Knots 138 Knots 138 Knots 148 Knot	1. DZ ELEVATION SELECTION	DN (Feet) 1. Feet CARGO 25. X DUAL RAIL	2. SURFACE WI 4-7 K AERIAI	C-1 8. DATE NDS (Knots) nOts	7 AND TIME 13. VISI 7	BILITY (Feet/Miles) 7 Miles
10. ACFT ALTITUDE (Feet) 1100 AGL 1100 AGL 10. ACFT ALTITUDE (Feet) 10. ACFT ALTITUDE (Feet) 110. ACFT ALTITUDE (Feet) 124. WEIGHT HMMWV with Howitzer 26. Type Platform/Air- DROP CONTAINER 32-Foot Type V	RIGGED IAW (TMITOINAV FM 10-519/ TO 13C7-10	1. DZ ELEVATII 529 AIR No.)	DN (Feet) 1: Feet CARGO 25. X DUAL RAIL	4-7 K	8. DATE NDS (Knots) nOts	13. VISI	BILITY (FeetiMiles) 7 Miles
11.00 AGL 11.00 AGL 11.00 AGL 11.00 AGL 11.00 AGL 11.00 AGL 124. 125. TYPE LOAD AND WEIGHT HMMWV With Howitzer 126. TYPE PLATFORM/AIR DROP CONTAINER 127. 128. Type V	RIGGED IAW (TMITOINAV FM 10-519/ TO 13C7-10	1. DZ ELEVATII 529 AIR No.)	DN (Feet) 1: Feet CARGO 25. X DUAL RAIL	4-7 K	NDS (Knots) NOTS	13. VISI	BILITY (FeetiMiles) 7 Miles
1100 AGL NI. 3. TYPE LOAD AND WEIGHT HMMWV with Howitzer 6. TYPE PLATFORM/AIR DROP CONTAINER 32-FOOT Type V	RIGGED IAW (TMITOINAV FM 10-519/ TO 13C7-10	529 (AIR No.)	Feet CARGO 25. X DUAL RAIL	4-7 K	nots	TEM USED	7 Miles
1100 AGL II. 3. TYPE LOAD AND WEIGHT HMMWV with Howitzer 6. TYPE PLATFORM/AIR-DROP CONTAINER 32-Foot Type V	RIGGED IAW (TMITOINAV FM 10-519/ TO 13C7-10	529 (AIR No.)	Feet CARGO 25. X DUAL RAIL	4-7 K	nots	TEM USED	7 Miles
H. 3. TYPE LOAD AND WEIGHT HMMWV with Howitzer 6. TYPE PLATFORM AIR DROP CONTAINER 32-FOOT Type V	FM 10-519/ TO 13C7-10	(AIR No.)	CARGO 25. X DUAL RAIL	AERIAI	. DELIVERY SYS	TEM USED	
3. TYPE LOAD AND WEIGHT 24. HMMWV with Howitzer 6. TYPE PLATFORM/AIR-DROP CONTAINER 27. 32-Foot Type V	FM 10-519/ TO 13C7-10	AIR No.)	25. X DUAL RAIL	. CDS R		ĭ)
3. TYPE LOAD AND WEIGHT 24. HMMWV with Howitzer 6. TYPE PLATFORM/AIR-DROP CONTAINER 27. 32-Foot Type V	FM 10-519/ TO 13C7-10	AIR No.)	25. X DUAL RAIL	. CDS R		ĭ)
HMMWV with Howitzer 6. TYPE PLATFORM/AIR-DROP CONTAINER 32-Foot Type V	FM 10-519/ TO 13C7-10	·	X DUAL RAIL	. CDS R		ĭ)
with Howitzer 6. Type Platform/Air- DROP CONTAINER 32-Foot Type V	TO 13C7-10	-31	1 - 4 - 1 - 1 - 1	 	ELEASE GATE	OTHER	
with Howitzer 6. Type Platform Air- DROP CONTAINER 32-Foot Type V	TO 13C7-10	-31		NO CC		UIMER	(Explain)
32-Foot Type V	TYPE PARACHUTE	-31			NTAINERS	1	
32-Foot Type V					NA	1	
32-Foot Type V		28. SIZE EXT	PACTION/RE	29. LENGTH		20.000	ITION OF LOAD IN
Type V			ARACHUTE	LINE	Dr REEFING		CRAFT
		•					
	4 X G11C	1	X 28		N/A		
After an investigatio deployment phase, c damage done to the shifted after it landed	on, we found that causing the load HMMWV. The	t the 20 fo to hit the	oot 21p riser ground har	r extensio d. No daı	n had bro mages to	the hov	witzer, little

WHAT WAS THE MALFUNCTION?

Two G-11s did not inflate causing the load to not have the required lift capability.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The 20-foot rister extension broke.

- 1. Pay more attention to detail.
- 2. Ensure every corner or sharp edge is padded/secured.
- 3. There really was not enough information.

$T\Delta$	R	&N	A/S.	Δ \	m	T.	П
	. 17	. CX.II	/I/ L7.		•		

PERSONNEL MALFUNCTION REPORTS AND ANALYSES

1.				GENERAL						
1. UNIT BEING AIRLIFTED		2. DEPARTURE	E AIRF	FIELD	3.	DATE	1 "	TYPE ACFT C-130		5. ACFT SER NO.
6. OPERATION/EXERCISE				7. DZ AND LOCATION				8. DATE A	ND TIME	
9. ACFT ALTITUDE (Feet)	10. ACFT S	PEED (Knots)	11.	DZ ELEVATION (Feet)		12. SURFACE WIN	NDS ((nots)	13. VISIB	ILITY (Feet/Miles)
800 AGL	130	Knots		360 Feet		0-	3		5+	Miles
II.				PERSONNE	L					
14. NAME (Last, First, MI), G	RADE, SSAN,	& UNIT		equipment worn by LCE, Kevlar, 126 w/H250 F	M-	1950 PRC				on in acet and Aircraft
17. TYPE PARACHUTE (Specify)	18.			TYPE MALFUN	CTIO	N				19. NO. JUMPS
(3Decirvi	SEM	I-INVERSION		INVERSION	X	CIGARETTE ROLL		OTHER (SPECIFY)	
T-10C	PILC	OT CHUTE		BLOWN SECTION		BROKEN SUSPEN- SION LINE	•			30
20. TYPE OF RESERVE T-10 Reserve	ED PR		NO	22. RESULTING INJUI		oroken (L) l	kne	e		
				72						
31. DESCRIPTION O	F MALFUN	CTION/FAIL	URE	Z/ DAMAGE INCUR	RED) (if more space	is ne	eded, con	inue on	reverse.)

This airborne operation involved three aircraft. As the jumpers exited the aircrafts, a jumper from the second aircraft (left door #22) went into a spin. His main parachute deployed but went into a cigarette roll. At about 150 feet, the jumper's reserve parachute deplooyed, causing him to land sustaining only minor injuries.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Upon completion of investigation, it was determined there were two causes for this malfunction; poor exit and improperly positioned item of equipment. After questioning the jumper, he revealed that he had a bad exit, and at his second point of performance, he noticed his main parachute in a cigarette roll configuration and deployed his reserve. The jumper landed before he noticed his reserve fully deployed. The jumper was jumping an exposed PRC-126 radio attached to the rear of his pistol belt. The H 250 Hand Set was attached to the front of his LCE. The jumper also jumped an M 1950 weapon case with an M-16 inside. The inspection of the jumper's main parachute revealed the H 250 Hand Set with the cord attached was entangled with all 30 suspension lines of the main parachute approximately 6 inches below the anti-inversion net. (CONT)

CONTINUED ON NEXT PAGE

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

This caused the main parachute air channel to be locked not allowing it to deploy, but in effect streamer. The inspection of the reserve parachute revealed that the delayed full deployment of the reserve parachute can be attributed possibly to the reserve pilot parachute (still attached to the apex) entangled with the T-10 main parachute and H 250 Hand Set. The canopy of the reserve parachute was not entangled with the main parachute or any other object, yet the reserve pilot parachute was still attached to the apex of the reserve and not allowed to completely elongate. The resulting action was restricted reserve deployment.

ANALYSIS: 23

WHAT WAS THE MALFUNCTION?

Cigarette roll.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. Improperly stored equipment.
- 2. Improperly rigged equipment (PRC-126 Hand Set).

- 1. Have a unit SOP (regarding equipment).
- 2. Will identify to Fort Benning about expoed items of equipment.

				GENERAL					***	
UNIT BEING AIRLIFTED		2. DEPARTI	URE All		3.	DATE	4.	TYPE ACFT	Ī	S. ACFT SER NO.
								Casa 21	2	
OPERATION/EXERCISE				7. DZ AND LOCATION				8. DATE A		
ACFT ALTITUDE (Feet)	10.	ACFT SPEED (Knots)	1	1. DZ ELEVATION (Feet)		12. SURFACE V	VINDS (Knots)	13. VISIBI	LITY (Feet/Miles)
2,500 ft AGL		110 Knots		490 Feet MS	L	2 F	Cnot	S	Un	limited
				PERSONNE	L	.			<u> </u>	
4. NAME (Last, First, MI), (GRADE,	SSAN, & UNIT	11	S. EQUIPMENT WORN BY	ŲMI	PER		16. JUMPEI	R'S POSITIO	N IN ACFT
								14th (Ramp	Out of Exit	15
7. TYPE PARACHUTE (Specify)	18.			TYPE MALFUN	CTIC	N		1		19. NO. JUMP
(3DBC//F)		SEMI-INVERSION		INVERSION	\Box	CIGARETTE RO	LL	OTHER	(SPECIFY)	
MC-4		PILOT CHUTE		BLOWN SECTION		BROKEN SUSPI	EN-		Twist/g Slide	r 10
0. TYPE OF RESERVE	21.	RESERVE FUNCTION- ED PROPERLY (#		22. RESULTING INJUR	Υ			·············		
MC-4		"No" explain in item 31)		Nor	e					
		X yes] NO		-					
					-					
32. CAUSE OF MAI After inspection give adequate ti and landed on the	of the	he main cano to remove tw	py, 1 ists	no damage or ab and cut away at	no	rmalities	were	found.	Jump d a goo	er did not od reserve
							_			

WHAT WAS THE MALFUNCTION?

Line over/hung slider.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- Unstable body position at opening.
 Improper packing procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

- Enforce closer supervision of packing procedures.
 Ensure jumper has a stable body position prior to and through the entire pull sequence.

NOTE: The main canopy's toggles were still stowed upon recovery.

•					CENTER	_		_			
I. 1. UNIT BEING AIRLIFTED		2. DEPART	URE A	IRFI	GENERAL ELD	3.	DATE	4.	TYPE ACFT	T	S. ACFT SER NO.
								C	C 130		
6. OPERATION/EXERCISE				٦	7. DZ AND LOCATION	<u> </u>			8. DATE A	ND TIME	
							1				
9. ACFT ALTITUDE (Feet)	10.	ACFT SPEED (Knots)			DZ ELEVATION (Feet)		12. SURFACE WING		-	l	ITY (Feet/Miles)
12,500 ft AGL	Ц_	120 Knots		_	490 Feet MSL		8 Kn	ots	.	Un	imited
ll. 14. NAME <i>(Last, First, Ml),</i> Gl	\ A D.F.	CCAN A HAUT	1.		PERSONNEL QUIPMENT WORN BY JU		or n	1	45 11144050	'C BOCITIO	N IN ACCT
14. NAME (Last, First, MI), GI	KADE,	SSAN, & UNII	ď	15. [IMP	EK	ı	16. JUMPER		
					, MC-4				3rd Ju	ımper,	Ramp Exit
17. TYPE PARACHUTE (Specify)	18.				TYPE MALFUNC	TIO	N				19. NO. JUMPS
		SEMI-INVERSION	<u> </u>	Ļ	INVERSION	1	CIGARETTE ROLL			SPECIFY)	_[
MC-4		PILOT CHUTE		١	BLOWN SECTION	ı	BROKEN SUSPEN- SION LINE		See #3	e Item 2	12
20. TYPE OF RESERVE	21.	RESERVE FUNCTION	<u> </u>		22. RESULTING INJURY	,			<u> </u>		
		ED PROPERLY (If "No" explain in item 31)									
MC-4		X YES] NO)	İ		None				
32. CAUSE OF MAI After inspection stated that he con tail was pulled up towards the bridl during the packin pulling it forward damage was foun	of the last of the	he main cano not see his p ver the top. T tachment po	py, ilot he i int.	nc pa ns It	damage or about the damage or about the damage or also views my opinion the damage of the damage of the damage of the damage of the damage of the damage of the damage of the damage of the damage of the damage of the damage or about the damage or about the damage of the damage or about the damage of the	noi he wo	rmalitiies we front or rear ed the tail of t the bridle li	ere r of the ine	found. f the ca e canop was no	nopy, bein ot clear	and that the g pulled ed properly
		CC)N ′]	ΓI	NUED ON NI	ΕX	KT PAGE				

WHAT WAS THE MALFUNCTION?

Not enough information to determine cause of malfunction due to the lack of physical evidence.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper packing procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Increase supervision during packing procedures.

NOTE: Student was observed in air by the instructor, the instructor provided the statement.

1.					GENERAL						
I. UNIT BEING AIRLIFTED		2. DE	PARTUR	E AIR		3.	DATE		TYPE ACFT		5. ACFT SER NO.
5. OPERATION/EXERCISE				-	7. DZ AND LOCATION	<u> </u>		_	8. DATE A	ND TIME	
9. ACFT ALTITUDE (Feet) 12,500 AGL		ACFT SPEED (Kn	ots)	11	. DZ ELEVATION (Feet) 490 MSL		12. SURFACE WI		(nots)		LITY (Feet/Miles) limited
					PERSONN	L				L	
14. NAME (Last, First, MI), GI	RADE,	SSAN, & UNIT		15	EQUIPMENT WORN BY		PER	T	16. JUMPER	'S POSITIO	IN IN ACFT
					Twin 53, MP Sack Weapon		2, Ruck		5th Ju	mper/	2nd Pass
17. TYPE PARACHUTE	18.				TYPE MALFUI	ICTIO	N			•	19. NO. JUMPS
(Specify)		SEMI-INVERS	ion'		INVERSION	T	CIGARETTE ROLL		OTHER (SPECIFY)	7
MC-4		PILOT CHUTE			BLOWN SECTION		BROKEN SUSPEN	-	Twi Rise		17
20. TYPE OF RESERVE	21.	RESERVE FUNCT			22. RESULTING INJU	RY					
		*No" explain in									
MC-4		item 31) X		NO	No	ne					
32. CAUSE OF MALE	ins	spection o	f the	M	C4 main canop	y, tl	here was no	o da	mage f	ound.	Both
toggles were still unstable when he right shoulder on stable body positi	pul oull	led his ma causing h	ain ri im to	pco o ro	ord. The instruct Il through his ri	ctor	in the air o	bseı	rved the	e jump	er drop his
							7	_			_
			CO	NT	INUED ON N	EX	KT PAGE				

WHAT WAS THE MALFUNCTION?

There was no malfunction. It was an incident.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Unstable body position at pull altitude and during pull sequence.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Jumper needs to maintain stable body position at pull altitude and during pull sequence.

					GENERAL						
UNIT BEING AIRLIFTED		2. DEPARTI	JRE A	IRF		3.	DATE	4.	TYPE ACFT		5. ACFT SER NO.
									C-13	30	
OPERATION/EXERCISE					7. DZ AND LOCATION			4	8. DATE A		
ACFT ALTITUDE (Feet)	10.	ACFT SPEED (Knots)		11.	DZ ELEVATION (Feet)		12. SURFACE W		·-		LITY (FeetiMiles)
12,500 Ft AGL		130 Knots			480 Feet		4 K	nots			Jnlimited
			_		PERSONNEI						
4. NAME (Last, First, MI), GI	ADE,	SSAN, & UNIT		15. (EQUIPMENT WORN BY JU	МР	ER		16. JUMPER	r's Positio	ON IN ACFT
				I	MC-4 Parachut	e S	System		5th Ju	ımper	of 12
7. TYPE PARACHUTE	18.				TYPE MALFUNG	TIO	N			•	19. NO. JUMP
(Specify)		SEMI-INVERSION	Ι	Ι	INVERSION	I	CIGARETTE ROL	.L	OTHER (SPECIFY)	
MC-4		PILOT CHUTE			BLOWN SECTION	ı	BROKEN SUSPE	N-	Premat Release	ure Bra	ke 29
0. TYPE OF RESERVE	21.	RESERVE FUNCTION-			22. RESULTING INJUR	_			Release		
		ED PROPERLY (If "No" explain in									
MC-4		item 31)] NC	`	None	9					
	느					-					
32. CAUSE OF MAI After 100 percentoggle was still stocked his toggle considered a malf	t ins owe s bu	spection of the ed and right to at only cleare	e n	nai le	in canopy, no d was free causir	an g	nage or ab	norr turn	nalities left. Ju	mper	thought he
								_			
		CO)N	ΓI	NUED ON NI	ΞX	KT PAGE				

WHAT WAS THE MALFUNCTION?

This was no malfunction. It was an incident.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- Tumbling and spinning during pull sequence.
 Unstable body position during pull sequence.
 Improper post opening procedures.

- Place more emphasis on post opening procedures during prejump training.
 Maintain stable body position at pull altitude and during pull sequence.

							_							
l.			1		_	GENERAL								
1. UNIT BEING AIRLIFTED			2. DEPARTU	RE All	RFI	ELD	3.	DATE	4. TYI	PE ACFT	[9	. ACFT SER NO.		
			<u> </u>		_		_			C-13				
6. OPERATION/EXERCISE					1	7. DZ AND LOCATION			8.	DATE AN	D TIME			
9. ACFT ALTITUDE (Feet)	10.	ACFT SP	PEED (Knots)	1	11. DZ ELEVATION (Feet) 12. SURFA			12. SURFACE WIND	S (Kno	ots)	13. VISIBIL	ITY (Feet/Miles)		
1250		13	30			280		6-8			150	0/2 Miles		
II.						PERSONNE								
14. NAME (Last, First, MI), C	RADE,	SSAN, 8	& UNIT	119	5. E	QUIPMENT WORN BY J	JMP	ER	16.	JUMPER'S	S POSITIO	N IN ACFT		
				1						Chal	k#7 I	eft Door		
				1		NONE	3			#1 Jı	ımper			
17. TYPE PARACHUTE	18.					TYPE MALFUN	TIO	N				19. NO. JUMPS		
(Specify)	-	CENN	-INVERSION '	_	Г	INVERSION	Т	CIGARETTE ROLL		OTHER (S	BECIEVA	1		
	-			 	H		+			OTHER ()	recirf)	1		
T-10C		PILO	T CHUTE	\mathbf{X}	1	BLOWN SECTION		BROKEN SUSPEN- SION LINE				0		
· · · · · · · · · · · · · · · · · · ·	+-	L		1.	L	I		2.OH LINE						
20. TYPE OF RESERVE	21.	ED PRO	E FUNCTION- OPERLY (#			22. RESULTING INJUR	4							
		"No" e item 3	xplain in 1)											
			YES	NO				None						
During the inspedamage. Jumpe possibility that table cause of the quently packed in	ctio r lar he d e ma	n of todged in the contraction of the contraction o	he canop in an area was pick ction was	y do a of ked s tha	eb th uj	oris was found ne drop zone th p on the drop z debris was not	in at	the anti-inve was clear of he after the ju	rsioi deb mpe	n net a oris rul er lanc	ing ou led. T	it the he prob-		
									-					
			co	NT	'I	NUED ON N	ΕX	KT PAGE						

WHAT WAS THE MALFUNCTION?

Blown section/anti-inversion net damage.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- Improper shakeout procedures.
 Improper pack inprocess inspection.
- 3. Packer inattention to detail.

- 1. Research the relationship of op temp with personnel needed to accomplish the mission.
- 2. Identify maintenance parachutes and remove from service.
- 3. Possible outsource from the Airdrop Systems Technician community. Go to the facility and observe.

1. UNIT BEING AIRLIFTED		2. DEPARTU	RE A	GENER		DATE	I A	TYPE ACFT	1	i. ACFT SER NO.		
I. VAII BEING AIRLIFIED		Z. DEPARTO	NE All	Tricto	1.	DATE	14		- 1	ACTI SER NU.		
6. OPERATION/EXERCISE				7. DZ AND LOCA	TION		I	C-13				
J. J. EIGHTOWEACHCIDE				DE AND LOCA				J. DAILA	IIIVIE			
9. ACFT ALTITUDE (Feet)	10	ACFT SPEED (Knots)	11	1. DZ ELEVATION (F	eet)	12 SLIREA	CE WINDS ((Knots)	13. VISIBII	ITY (Feet/Miles)		
	"		ı,	•	 	I Z. JONI A	2	Knotsj	l	•		
10,000 II.	<u></u>	125		410 PERSO	MMEI	<u></u>			UIII	imited		
II. 14. NAME <i>(Last, First, MI),</i> GI	DADE	CCAN P LIMIT	1,	5. EQUIPMENT WOR		ac D		16. JUMPER	'C BOCITIO	U IN ACET		
14. NAME (Last, First, Mil), QI	WDE,	SSAN, & UNIT	- 1	DCU, Boots			NA C	16. JUNIPER	3 7031110	TIN ACTI		
				Altimeter, C			oves,		Six	h		
17. TYPE PARACHUTE	18.				ALFUNCTIO				, DIA	19. NO. JUMPS		
(Specify)		CENT WATERCOOK	·		-croweric		. DOLL	OTHER :	CRECIE	- I S. NO. JOMPS		
	 -	SEMI-INVERSION	╁─╴	INVERSION	-+-	CIGARETTE			SPECIFY)	┥		
MC-4		PILOT CHUTE		BLOWN SECTION	'	BROKEN SI SION LINE	USPEN-		Activa	1		
20. TYPE OF RESERVE	 	DECEMBER PROPERTY.		22 BEGIN TOUG	INIUIAY	3.3.4 EINE		tion				
ZU. I TPE OF KESEKVE	Z1.	RESERVE FUNCTION- ED PROPERLY (#		22. RESULTING	MUUKY							
MC 4		"No" explain in item 31)			NT							
MC-4		X YES	NO		None							
					Z							
32. CAUSE OF MAI The AR2 was set did not arm his A altitude test cham be determined at	on R2 ibei	2000 feet, the until told to d upon return t	e pro	oper setting in the aircr	for the	e drop z 5,000 fe	one. T et AGL	he jump L. The A	AR2 w	as tested in		
						_						
		CO	ΝΊ	INUED O	N NEX	XT PA (GE					

WHAT WAS THE MALFUNCTION?

Improper activation of the AR2.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. Possible pressure difference caused by the flapping kit bag giving the AR2 a false reading.
- 2. Possible failure to recycle the AR2.
- 3. Wearing of non-standard equipment (camelback) could have caused the kit bag to become unsecure.

- 1. Relook how the jumper has kit bag configured and make sure it is IAW 31-19.
- 2. Ensure that jumpmasters have "positive" control when arming the AR2.
- 3. Look at the wearing of non-standard equipment.

					_				
. UNIT BEING AIRLIFTED		2. DEPARTU	DE AIF	GENERAL	2 .	DATE	4. TYPE ACFI		S. ACFT SER NO.
. UNIT BEING AIRLIFTED		2. DEPARTU	RE AIF	FIELD	3. L	DATE	4. TYPE ACF1 C-2	S. ACFT SER NO.	
. OPERATION/EXERCISE				7. DZ AND LOCATION			B. DATE	AND TIME	
). ACFT ALTITUDE (Feet)		ACFT SPEED (Knots)	1	I. DZ ELEVATION (Feet)		12. SURFACE WINDS			ITY (Feet/Miles)
2,500 Feet AGI	4	100		700		9-14	ļ.	Un	imited
				PERSONNEL					
4. NAME (Last, First, MI), (RADE,	SSAN, & UNIT	15	. EQUIPMENT WORN BY JU	MPE	ER	16. JUMPE	R'S POSITIO	N IN ACFT
				Helmet, LBE, R	uc	k, Weapon,			
				Goggles Gloves		-	last	of seve	n
7. TYPE PARACHUTE	18.			TYPE MALFUNCT	TION	N		•	19. NO. JUMP
(Specify)		SEMI-INVERSION	T	INVERSION	Т	CIGARETTE ROLL	OTHER	(SPECIFY)	1
	-	PILOT CHUTE		BLOWN SECTION	+	BROKEN SUSPEN-		,,	1
MC-4		TILOT CHOTE		SCOUNT SECTION		SION LINE	Cut	-away	65
D. TYPE OF RESERVE	+,-	RESERVE FUNCTION		22. RESULTING INJURY	_		Cut	away	US
ITE OF NESERVE	''	ED PROPERLY (If		22. RESOLING INJURY					
MC-4	1	"No" explain in item 31)		NTorra					
WIC-4		X YES	NO	None					
chute becoming	enta have	ngled with the e caused the pi	con	on at pull altitude ntrol lines during parachute to go t ition at opening.	op	ening. The r	ight han	d turnir	ng or

WHAT WAS THE MALFUNCTION?

Pilot parachute wrapped around the left side control lines.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Iproper body position during pull sequence.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure and stress "stable body position during pull sequence".

1.				CENERAL									
I. UNIT BEING AIRLIFTED		2. DEPARTU	RE A	GENERAL RFIELD	3	. DATE	1 4	. TYPE ACFT		5. ACFT SER NO.			
			- • • •			-		C-1.					
5. OPERATION/EXERCISE				7. DZ AND LOCATION				8. DATE A					
). ACFT ALTITUDE (Feet)	10.	ACFT SPEED (Knots)	1	1. DZ ELEVATION (Feet)	•	12. SURFACE			1	ILITY (Feet/Miles)			
800 Ft AGL		130 Knots	\perp	313.5 feet		1-2	Kno	ots	Ur	restricted			
l.				PERSONN				•					
14. NAME (Last, First, MI), GR	ADE,	SSAN, & UNIT	ا	5. EQUIPMENT WORN BY				i		ON IN ACFT			
				Combat Equp (Ruck and We					alk 1 ght Do	or#11			
7. TYPE PARACHUTE (Specify)	18.			TYPE MALFL	NCTIC	ON			11	19. NO. JUMPS			
(2Decity)		SEMI-INVERSION	Γ	INVERSION		CIGARETTE RO	OLL	OTHER (SPECIFY)					
T-10C		PILOT CHUTE		BLOWN SECTION		BROKEN SUSF	EN-	Knot in canopy 1 ft below apex					
0. TYPE OF RESERVE	21.	RESERVE FUNCTION		22. RESULTING INJ	RY								
		ED PROPERLY (If "No" explain in		N/A									
T-10 Reserve		item 31)	NO	Moini	ury	sustained							
	<u> </u>												
had most of cand initial inspection 32. CAUSE OF MALI Improper packing	was 	s found not to	be.						. How	ever upon			
		CO	ΝΊ	TINUED ON I	NE)	XT PAGI	Œ						

WHAT WAS THE MALFUNCTION?

Knot in canopy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- Possible improperly stowed canopy in the D-bag.
 Possibly happened during deployment phase.
 Inconclusive information.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not enough information on the 1848-1 to draw any type of conclusion.

2. DEPARTURE A SPEED (Knots)) Knots		GENERAL 7. DZ AND LOCATION DZ ELEVATION (Feet)	3. (DATE	4. TYPE ACFT C130		S. ACFT SER NO.
SPEED (Knots)		7. DZ AND LOCATION	3. (DATE			i. ACFT SER NO.
			<u> </u>		U10		
	11. (DZ ELEVATION (Feet)			8. DATE A	ND TIME	
) Knots	<u> </u>	770	\neg	12. SURFACE WINDS		13. VISIBIL	ITY (Feet/Miles)
		558		8 Kr	iots	L	
		PERSONNEL					
	LO		Cas	se (100 mm)	1st		at Door
		TYPE MALFUNC	TION	N			19. NO. JUMPS
AI-INVERSION	I	INVERSION	T	CIGARETTE ROLL	OTHER (SPECIFY)]
ОТ СНИТЕ	T	BLOWN SECTION		BROKEN SUSPEN- SION LINE			12
RVE FUNCTION- ROPERLY (If ' explain in 31)	0			e			
	=						
ircraft, the ju	ımp ne tv	per experienced wists were out l	d vi he	iolent twist in said his right	n the susp	ension release	lines and
וו אינו אינו אינו אינו אינו אינו אינו אי	OT CHUTE EVE FUNCTION- ROPERLY (If explain in 31) YES NO ENCTION/FAILU Aircraft, the jued after all the	OT CHUTE OT CHUTE EVE FUNCTION ROPERLY (If explain in 31) YES NO NCTION/FAILURE/ ircraft, the jumpled after all the tranness. The jumple	Lowering line, Kontrology and the pure succession of the pure succes	Lowering line, Kevinteen Line of the parties of the	LOWERING line, Kevlar TYPE MALFUNCTION MI-INVERSION INVERSION CIGARETTE ROLL OT CHUTE BLOWN SECTION BROKEN SUSPENSION LINE 22. RESULTING INJURY NONe NONe NOTION/FAILURE/ DAMAGE INCURRED (if more space is a sirror aft, the jumper experienced violent twist in the dafter all the twists were out he said his right marness. The jumper activated his reserve. The	LOWERING LINE LAS TYPE MALFUNCTION MI-INVERSION INVERSION CIGARETTE ROLL OTHER (OT CHUTE BLOWN SECTION BROKEN SUSPEN- SION LINE NOTE FUNCTION- ROPERLY (If (explain in 31)) YES NO NOne NOTION/FAILURE/ DAMAGE INCURRED (if more space is needed, contaircraft, the jumper experienced violent twist in the suspend after all the twists were out he said his right canopy narness. The jumper activated his reserve. The jumper	LOWERING Line, Kevlar TYPE MALFUNCTION MI-INVERSION INVERSION CIGARETTE ROLL OTHER (SPECIFY) OT CHUTE BLOWN SECTION BROKEN SUSPENSION LINE 22. RESULTING INJURY NONE NONE NOTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on redirecraft, the jumper experienced violent twist in the suspension ed after all the twists were out he said his right canopy release narness. The jumper activated his reserve. The jumper stated

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After talking with the jumper and reviewing the statements of the medics and other jumpers the following was found. First the jumper fell in the aircraft and the safety assisted him up and out the aircraft. The jumper stated that the twist in his risers forced his chin on his chest. After the jumper recovered, he said he felt the canopy jerk him hard to the left, so he activated his reserve. The jumper landed with no injuries. The jumper recovered all the equipment before the malfunction NCO arrived. After inspecting the main parachute, no deficiencies were found on either of the canopy releases. The reserve still had four and one half stows remaining in the packtray. I talked to other jumpers who stated that the jumper had a main canopy with the reserve fluttering in front of him. The jumper stated that he panicked after pulling his reserve. I

-	believe the jumper panicked after having violent twist. Once he felt the hard jerk from the risers straightening out, he activated his reserve. However, if you have only one riser you will not have any lift capability and your reserve would have fully deployed.
	CONTINUED ON NEXT PAGE
(56

WHAT WAS THE MALFUNCTION?

There was no malfunction. It was an incident.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

- 1. Bad exit.
- 2. Jumper inexperience.3. Condition of jumper.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

For safety reasons, the jumper should not have exited the aircraft on that pass. (Landslide effect resulted.)

					CENERA							
. UNIT BEING AIRLIFTED		2 DED	ARTUR	E AIRF	GENERAL	3 1	DATE	4. TYPE ACE	1	5. ACFT SER NO.		
. O.T. BEING AIREIT IED		12. 56		AIRF		֓֟֟֟֓֟֟֓֓֟֟ <u>֟</u>		C-1		J. ACI I JER NO.		
. OPERATION/EXERCISE					7. DZ AND LOCATION	L			41 AND TIME			
					20011101							
. ACFT ALTITUDE (Feet)	10.	ACFT SPEED (Kno	ots)	11.	DZ ELEVATION (Feet)		12. SURFACE WINDS	(Knots)	13. VISIBI	LITY (Feet/Miles)		
800 AGL		135 Kno	ts		529 Feet		4-7 Kn	ots		7 Miles		
i.					PERSONNE	-						
4. NAME (Last, First, MI), G	RADE,	SSAN, & UNIT		15.	EQUIPMENT WORN BY J	MPE	ER	16. JUMPE	R'S POSITIO	IN IN ACFT		
					Kevlar, LCE, L				RT/33			
2 TVDE BADACHUTE	L			<u> </u>	Line, Weapons				K1/33	19. NO. JUMPS		
17. TYPE PARACHUTE (Specify)	18.	SEMI-INVERSI		Т	TYPE MALFUN	_	CIGARETTE ROLL	OTHE	(SPECIFY)	19. NO. JOMPS		
		PILOT CHUTE	<i></i>	$\vdash \vdash$	BLOWN SECTION	+	BROKEN SUSPEN-			1		
T-10C		, or chore			220111 32011014		SION LINE	mei	angle- nt	16		
0. TYPE OF RESERVE	21.	RESERVE FUNCT			22. RESULTING INJUR	, 						
	-	ED PROPERLY (f "No" explain in	,		1							
T-10C	1	item 31) YES	X	NO	Neck,	Ва	ack, and Hea	.d				
32. CAUSE OF MADE	irst	jumper be	com	ing	entangled with	the	second jump	per, the	first jur open.	nper's		

WHAT WAS THE MALFUNCTION?

There was no malfunction. It was an incident (entanglement).

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Jumper had a poor exit which caused a landslide effect of several problems.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Reenforce the first and third points of performance during prejump. (The first being proper body position and the third keeping a sharp lookout for fellow jumpers during your entire descent.)

1				GENERA!								
I. UNIT BEING AIRLIFTED		2. DEPARTU	RE AIR	GENERAL FIELD	3.	DATE	4. TYPE ACE C-1		5. ACFT SER NO.			
5. OPERATION/EXERCISE		I	-	7. DZ AND LOCATION	<u> </u>			AND TIME				
9. ACFT ALTITUDE (Feet)	10.	ACFT SPEED (Knots)	11	. DZ ELEVATION (Feet)		12. SURFACE WINDS			ILITY (Feet/Miles)			
800 AGL	<u></u>	135		274 Feet		8-10 Kn	ots	Cl	ear			
l.				PERSONNE			,					
14. NAME (Last, First, MI), GI	RADE,	SSAN, & UNIT	115.	Alice Pack, M1950 We	L	CE		er's position -6/R-9				
17. TYPE PARACHUTE	18.			TYPE MALFUNG	TIOI	N		•	19. NO. JUMPS			
(Specify)		SEMI-INVERSION		INVERSION		CIGARETTE ROLL	OTHER (SPECIFY)					
T-10C		PILOT CHUTE		BLOWN SECTION	T	BROKEN SUSPEN- SION LINE						
20. TYPE OF RESERVE	21.	RESERVE FUNCTION- ED PROPERLY (If "No" explain in	,	22. RESULTING INJUR	1							
T-10 Res		item 31) X YES	NO	Head and	Ва	ack Injury Bo	th Jum	pers	,			
						<u></u>		<u>-</u> _				
32. CAUSE OF MAL Both jumpers ex- other jumper kee	ited	the aircraft fr	om	the left and door				e the ai	r from the			
							'					
		CO	NT.	INUED ON N	EΧ	T PAGE						

WHAT WAS THE MALFUNCTION?

Cannot determine due to the fact that the jumper held on to the second jumper's canopy therefore not allowing his canopy to receive enough air to properly inflate (incident not a malfunction).

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Simultaneous exit.

- Better control of the stick flow by the JM team.
 Reinforce actions in the aircraft during prejump.

										* · · · · · · · · · · · · · · · · · ·			
l.		In province	DE 415	GENERA		2475		7405 4 657		5 1557 558 110			
1. UNIT BEING AIRLIFTED		2. DEPARTU	RE AIF	RHELD	ď	. DATE	4	TYPE ACFT	20	5. ACFT SER NO.			
6. OPERATION/EXERCISE				7. DZ AND LOCATIO			L_	C-13					
6. OPERATION/EXERCISE				7. DZ AND LOCATII	JN			8. DATE A	ND TIME				
9. ACFT ALTITUDE (Feet)	10	ACFT SPEED (Knots)	11	1. DZ ELEVATION (Fee	*)	12. SURFACE W	/INDS /	Knots)	13 VISIRI	LITY (Feet/Miles)			
1250	10.7	130	I.	280	•		alm	-	Nig				
	L	130	L_		A151		allII		INI	3111			
ll. 14. NAME <i>(Last, First, MI),</i> GR	ADE	CCAN P LIMIT	1,,	PERSON	-	DED		16. JUMPER	'C BACITIC	M IN ACET			
14. NAME (Last, First, Mil), GR	AUE,	SSAN, & UNIT	'	. EQUIPMENT WORN	вт јом	PER		16. JUMPER	() PUSHIC	IN IN ACT			
			17	Γ-10C/Reserv	ve/Co	ombat			Thir	d			
17. TYPE PARACHUTE	18.		<u></u>	TYPE MAL	FUNCTIO	ON			•	19. NO. JUMPS			
(Specify)		SEMI-INVERSION	П	INVERSION	Т	CIGARETTE ROI	.i.	OTHER (SPECIFY)	7			
		PILOT CHUTE		BLOWN SECTION	\Box	BROKEN SUSPE	N-			7			
T-10C		1	X		X	SION LINE		4					
20. TYPE OF RESERVE	21.	RESERVE FUNCTION- ED PROPERLY (#		22. RESULTING IN	IJURY	- · · · · · · · · · · · · · · · · · · ·							
24-Foot Chest		"No" explain in											
Reserve		item 31) X YES	NO		Non	e							
11030110	느	[A] 163	NO		,	-							
3, 14 broken. The from gores #11, gores #5, 6, 14, 2 32. CAUSE OF MALI Net lock was the procedures or de procedures and e	12, 15, FUN pos	13, 14, 18, 22 28. Also the CTION/FAILURE ssible cause of caught in the	2, 2. brea E (If f ma	3, 28. Dama akcord attach more space is a alfunction. It	ge to ning l	the anti-ir loop was b	urne on re	sion ned. verse.)	t also d	occurred on			
						_							
		CO	NT	INUED ON	NEX	XT PAGE							

WHAT WAS THE MALFUNCTION?

- 1. Broken section.
- Broken suspension lines.
 Burns.
- 4. Damage to anti-inversion net.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Insufficient evidence:

- 1. No statements from the jumper(s).
- 2. A detailed TRI should have been included reflecting the damaged sections numbers, type of suspension line damage (detailed description).
- 3. No D-bag information.
- 4. No reserve inspection information.
- 5. No information on jumper's individual items of equipment.

The above information could have given us a focal point on the cause of damage.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not enough information given.

SUMMARY OF SUPPLY AND EQUIPMENT DROPS

3D TRIANNUAL CY 1997

	PLAT LO	FORM AD		GLE AINER	C	DS	LA	.PE	то	TAL
Number of Drops		1123	5	576	10	043		0		2742
Number of Malfunctions		8		4		10		0		22
Percentage of Malfunctions		0.071	0.0	070	0.	094		0	(0.080
Malfunction Phases:	IP	EF	IP	EF	ΙP	EF	IP	EF	IP	EF
Extraction	3	0	0	2	2	5	0	0	5	7
Deployment-Recovery	3	2	1	2	1	3	0	0	5	7
Release	0	0	0	0	0	0	0	0	0	0

IP-Incorrect Procedures

EF-Equipment Failure

SUMMARY OF PERSONNEL PARACHUTE JUMPS

3D TRIANNUAL CY 1997

		C-130	C-141	OTHER	TOTAL
	Number of Deployments	31,864	18,179	4,763	54,806
	Number of Malfunctions	6	2	0	8
Nonmaneuverable	Percentage of Malfunctions	0.018	0.011	0	0.014
	Number of Deployments	5,857	1,481	3,692	11,030
	Number of Malfunctions	0	0	0	0
Maneuverable	Percentage of Malfunctions	0	0	0	0
	Number of Deployments	3,099	1,959	1,463	6,621
	Number of Malfunctions	4	0	2	6
Free-Fall	Percentage of Malfunctions	0.012	0	0.013	0.025
	Number of Deployments	40,820	21,619	9,918	72,457
	Number of Malfunctions	10	2	2	14
Total	Percentage of Malfunctions	0.024	0.092	0.020	0.011

SUMMARY OF PERSONNEL PARACHUTE MALFUNCTIONS

3D TRIANNUAL CY 1997

	NON- MANUEVERABLE		MANUEVERABLE		FREE-FALL		RESERVE	
		*		*	a	¢		*
Number of Deployments	54,806		11,030		6,621		3	
Number of Malfunctions	9		0		6		1	
Towed jumper	0		0		0		0	
Broken Static Line	0		0		0		0	
Entanglement	0		0		0		0	
Failed to Inflate	2	*	0		0		1	
Inversion	0		0		0		0	
Pilot Chute	0		0		1		0	
Semi-Inversion	0		0		0		0	
Suspension Lines	0		0		0		0	
Other	7	*	0		5		0	П
Percentage of Malfunctions	0.164		0.000		0.009		0.3	П
Fatalities	1	*	0		0		1	*

^{*}Injuries

INJURIES OCCURRING ON PARACHUTE OPERATIONS AS REPORTED ON DA FORM 285

1 JULY - 30 SEPTEMBER 1997

	C-130	C-141	UNKNOWN	TOTAL
PLF-Related Injuries	10	9	3	22
Main Malfunction	0	0	0	0
Misrouting of Static Line	0	0	0	0
Entanglements	2	0	0	2
Tree Landings	2	0	1	0
In Aircraft	2	0	0	2
Hazards on Drop Zone	0	0	0	0
Other	3	0	2	5
Insufficient Information	0	0	0	0

AIRCRAFT MALFUNCTIONS

These malfunction reports are not included in the statistical data nor reflected in the percentage of malfunctions. All aircraft systems malfunctions which may have led to an abort or no-drop are constantly reviewed and analyzed for repeat or recurring trends and solutions. Corrective actions are recommended through Air Force maintenance systems.

PERSONNEL DROPS	
Improperly operating doors or ramps	0
Static line retriever	7
SUPPLY AND EQUIPMENT DROPS	
Rail locks	0
Improperly operating ADS	0
Improperly operating doors or ramps	0
Release mechanism	1
Electrical system	0
CONTAINER DROPS	
Rollers	0
Type XXVI gate	4
Static line retriever	4
TOTA	AL 9

HOT POOP

CHANGE TO FM 10-519

The following message was sent out to all units:

190800Z FEB 98

UNCLAS

SUBJECT: CHANGE 2, FM 10-519/TO 13C7-10-31/FMFM 7-55, AIRDROP OF SUPPLIES AND EQUIPMENT: RIGGING 105-MILLIMETER HOWITZERS, DATED 23 DECEMBER 1992.

- 1. ON PAGE 5-43, FIGURE 5-31 OF THE SUBJECT MANUAL, THE RIGGED LOAD DATA TABLE SHOWS THE HEIGHT OF THE LOAD TO BE 75 INCHES. THE HEIGHT SHOULD BE CHANGED TO READ 83 INCHES.
- 2. THIS CHANGE HAS BEEN COORDINATED THROUGH THE US ARMY AIRBORNE AND SPECIAL OPERATIONS TEST DIRECTORATE AT FORT BRAGG. THIS CHANGE WILL BE INCORPORATED INTO THE NEXT REVISION OF THE SUBJECT MANUAL.
- 3. POC FOR THIS MESSAGE IS ROGER HALE, DSN 687-4769 AND MSGT ALAN WAGNER, DSN 687-4757.

NEXT MALFUNCTION REVIEW BOARD AND RIGGER BALL

The next meeting of the Malfunction/Safety Review Board will be held 27 and 28 May 1998 at Fort Benning, GA. The 8th Annual Parachute Rigger Ball will be held 29 May 1998 in Columbus, GA. For additional information contact CW2 Marsha Billodeaux (706) 989-1343 or visit the website at http://www.benning.army.mil. RSVPs are required NLT 6 May 1998.

LIEUTENANT GENERAL JOHN J. CUSICK RETIREMENT

A retirement dinner and retirement ceremony will be held 28 and 29 April 1998 for LTG Cusick at Fort Lee, VA. For additional information contact Roger Hale, DSN 687-4769.

NEW WEBSITE ADDRESS

The new website address to access the Triannual Airdrop Review and Malfunction/Safety Analysis and other information has been changed. The new address is http://www.lee.army.mil/quarter-master/adfsd